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Table S1. Raw data for the response of the 17-element carbon black array to the nine test vapors.

Description of column headings and symbols

exposure	This column indicates the order in which the exposures were performed with 1 being the first exposure and 51 the last.
initial R	The initial baseline resistance before exposure (Ω)
max R	The maximum resistance during the exposure to the solvent vapor (Ω)
final R	The final baseline after a minimum of a 5 min recovery period (Ω)
% change	100(max R - initial R) / initial R
S	Normalized signal (see eq 3 in text): $S = \Delta R_{ij,\,max} / N$ where $\Delta R_{ij,\,max}$ = (max R - initial R) for the *j*th sensor to the *i*th exposure and *N* is the exposure normalization factor (listed in the last column of the table): $N = \sum_j (\Delta R_{ij,max})$
d	Autoscaled data (see eq 4 in text): $d = S_{ij} - \bar{S}_j / \sigma_j$ where S_{ij} is *S* for the *j*th sensor to the *ii*th exposure; $\bar{S}_j$ and σ_j (listed as $\bar{S}$ and σ) at the bottom of the table) are the mean and standard deviation, respectively, of all of the normalized signal responses of sensor *j* to the entire range of solvents.

		Sensor Element #1					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	390.2	391.1	390.3	0.23	0.0077	-0.57
	8	*396.7*	*397.2*	*396.2*	*0.13*	*0.0039*	*-0.60*
	19	403.1	403.0	401.2	-0.02	-0.0008	-0.65
	32	398.1	398.7	398.0	0.15	0.0046	-0.60
	37	399.2	399.6	398.3	0.10	0.0031	-0.61
	44	397.3	398.2	397.2	0.23	0.0072	-0.57
methanol	4	390.4	430.3	398.0	10.22	0.2775	1.96
	6	395.3	435.5	396.6	10.17	0.2907	2.08
	13	396.0	432.5	400.3	9.22	0.2970	2.14
	18	398.2	441.5	403.1	10.87	0.3129	2.29
	26	396.6	445.5	404.8	12.33	0.3295	2.45
	45	397.2	445.8	407.7	12.24	0.3293	2.45
isopropanol	10	395.9	396.6	395.0	0.18	0.0265	-0.39
	14	400.3	400.9	399.2	0.15	0.0217	-0.44
	17	399.0	400.1	398.2	0.27	0.0359	-0.30
	20	401.2	402.8	400.7	0.40	0.0482	-0.19
	38	398.3	399.4	398.2	0.28	0.0364	-0.30
	40	397.9	398.5	397.8	0.15	0.0333	-0.33
hexane	15	399.2	399.5	398.7	0.08	0.0038	-0.60
	24	398.2	398.4	397.9	0.05	0.0024	-0.62
	29	398.2	398.4	398.2	0.05	0.0027	-0.62
	31	398.2	398.5	398.1	0.08	0.0036	-0.61
	39	398.2	398.3	397.9	0.03	0.0014	-0.63
	48	404.3	404.7	404.1	0.10	0.0048	-0.59
ethyl acetate	21	400.7	405.3	398.5	1.15	0.0342	-0.32
	25	397.9	402.8	396.6	1.23	0.0367	-0.30
	27	404.8	409.9	402.0	1.26	0.0387	-0.28
	28	402.0	407.8	398.2	1.44	0.0485	-0.19
	34	398.8	404.1	398.4	1.33	0.0405	-0.26
	43	397.7	402.0	397.3	1.08	0.0294	-0.36
ethanol	11	395.0	404.6	396.4	2.43	0.1597	0.86
	16	398.7	407.9	399.0	2.31	0.1581	0.84
	33	398.0	409.4	398.8	2.86	0.1784	1.03
	35	398.4	409.8	399.6	2.86	0.1827	1.07
	36	399.6	403.6	399.2	1.00	0.1465	0.73
	46	407.7	418.5	406.2	2.65	0.1669	0.92
chloroform	3	390.3	391.8	390.4	0.38	0.0034	-0.61
	7	396.6	398.6	396.7	0.50	0.0060	-0.58
	9	396.2	398.0	395.9	0.45	0.0046	-0.60
	30	398.2	400.4	398.2	0.55	0.0056	-0.59
	41	397.8	399.6	397.6	0.45	0.0052	-0.59
	47	406.2	407.7	404.3	0.37	0.0044	-0.60
benzene	1	390.2	391.3	390.2	0.28	0.0080	-0.57
	5	398.0	398.6	395.3	0.15	0.0041	-0.60
	12	396.4	397.0	396.0	0.15	0.0041	-0.60
	22	398.5	399.4	398.4	0.23	0.0060	-0.58
	23	398.4	399.1	398.2	0.18	0.0050	-0.59
	42	397.6	398.6	397.7	0.25	0.0063	-0.58
acetone	49	404.1	420.5	404.1	4.06	0.0930	0.23
	50	404.1	421.9	404.9	4.40	0.1145	0.43
	51	404.9	421.4	405.5	4.08	0.1126	0.42
$\overline{S}$						0.0683	
σ						0.1067	

		Sensor Element #2					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	221.0	221.4	221.0	0.18	0.0034	-0.99
	8	221.1	221.7	221.1	0.27	0.0047	-0.82
	19	221.5	222.0	221.5	0.23	0.0040	-0.91
	32	221.3	222.1	221.4	0.36	0.0061	-0.64
	37	221.7	222.5	221.8	0.36	0.0063	-0.62
	44	221.6	222.6	221.7	0.45	0.0080	-0.39
methanol	4	221.0	224.6	221.2	1.63	0.0250	1.82
	6	221.1	224.8	221.2	1.67	0.0268	2.05
	13	221.3	224.5	221.3	1.45	0.0260	1.95
	18	221.4	224.8	221.5	1.54	0.0246	1.76
	26	221.2	225.2	221.5	1.81	0.0270	2.07
	45	221.7	225.4	221.9	1.67	0.0251	1.83
isopropanol	10	221.0	221.4	221.0	0.18	0.0152	0.54
	14	221.3	221.7	221.3	0.18	0.0144	0.44
	17	221.4	221.8	221.4	0.18	0.0131	0.27
	20	221.5	221.9	221.5	0.18	0.0120	0.13
	38	221.8	222.2	221.7	0.18	0.0132	0.29
	40	221.7	222.0	221.7	0.14	0.0167	0.73
hexane	15	221.3	221.5	221.3	0.09	0.0026	-1.10
	24	221.3	221.6	221.3	0.14	0.0036	-0.96
	29	221.4	221.7	221.5	0.14	0.0040	-0.92
	31	221.3	221.6	221.3	0.14	0.0036	-0.97
	39	221.7	222.0	221.7	0.14	0.0042	-0.89
	48	221.8	222.2	221.8	0.18	0.0048	-0.81
ethyl acetate	21	221.5	222.8	221.4	0.59	0.0097	-0.18
	25	221.3	222.8	221.2	0.68	0.0112	0.03
	27	221.5	222.9	221.4	0.63	0.0106	-0.05
	28	221.4	222.8	221.4	0.63	0.0117	0.09
	34	221.5	223.1	221.6	0.72	0.0122	0.16
	43	221.6	223.3	221.6	0.77	0.0116	0.08
ethanol	11	221.0	222.3	221.4	0.59	0.0216	1.38
	16	221.3	222.3	221.4	0.45	0.0172	0.80
	33	221.4	222.5	221.5	0.50	0.0172	0.80
	35	221.6	222.8	221.7	0.54	0.0192	1.07
	36	221.7	222.3	221.7	0.27	0.0220	1.42
	46	221.9	223.1	221.9	0.54	0.0185	0.98
chloroform	3	221.0	222.5	221.0	0.68	0.0034	-0.99
	7	221.2	222.5	221.1	0.59	0.0039	-0.93
	9	221.1	222.6	221.0	0.68	0.0038	-0.94
	30	221.5	223.2	221.3	0.77	0.0043	-0.87
	41	221.7	223.3	221.6	0.72	0.0046	-0.84
	47	221.9	223.7	221.8	0.81	0.0053	-0.75
benzene	1	221.0	221.7	221.0	0.32	0.0051	-0.78
	5	221.2	221.9	221.1	0.32	0.0048	-0.81
	12	221.4	222.0	221.3	0.27	0.0041	-0.90
	22	221.4	222.2	221.4	0.36	0.0053	-0.74
	23	221.4	222.2	221.3	0.36	0.0057	-0.70
	42	221.6	222.7	221.6	0.50	0.0069	-0.54
acetone	49	221.8	224.4	222.3	1.17	0.0147	0.48
	50	222.3	224.5	222.6	0.99	0.0141	0.41
	51	222.6	224.4	222.6	0.81	0.0123	0.16
$\overline{S}$						0.0110	
σ						0.0077	

		Sensor Element #3					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	317.0	319.7	317.0	0.85	0.0231	-0.51
	8	317.5	321.3	318.0	1.20	0.0300	-0.32
	19	318.9	322.5	318.9	1.13	0.0288	-0.35
	32	320.5	325.0	320.7	1.40	0.0345	-0.20
	37	321.7	326.0	321.6	1.34	0.0336	-0.22
	44	322.3	327.3	322.5	1.55	0.0401	-0.04
methanol	4	316.7	322.8	317.0	1.93	0.0424	0.02
	6	317.6	323.8	317.8	1.95	0.0448	0.09
	13	318.6	324.1	318.7	1.73	0.0448	0.09
	18	319.1	325.2	318.9	1.91	0.0441	0.07
	26	320.0	326.7	320.0	2.09	0.0451	0.10
	45	322.5	329.1	322.3	2.05	0.0447	0.09
isopropanol	10	317.9	319.3	318.8	0.44	0.0530	0.32
	14	318.7	320.3	319.1	0.50	0.0578	0.45
	17	319.3	321.1	319.1	0.55	0.0575	0.44
	20	318.9	320.8	319.4	0.60	0.0572	0.43
	38	321.6	323.7	322.0	0.65	0.0695	0.78
	40	321.9	323.2	322.2	0.40	0.0722	0.85
hexane	15	319.1	321.2	319.0	0.66	0.0269	-0.41
	24	319.3	322.0	319.5	0.85	0.0326	-0.25
	29	320.7	322.3	320.4	0.50	0.0213	-0.56
	31	319.8	323.0	320.5	1.00	0.0381	-0.10
	39	322.0	324.2	321.9	0.68	0.0305	-0.31
	48	322.4	326.0	323.0	1.12	0.0435	0.05
ethyl acetate	21	319.4	326.3	319.6	2.16	0.0513	0.27
	25	319.5	326.4	320.0	2.16	0.0517	0.28
	27	320.0	327.6	320.5	2.38	0.0577	0.45
	28	320.5	327.4	320.7	2.15	0.0576	0.45
	34	321.4	328.9	321.7	2.33	0.0573	0.44
	43	321.7	330.0	322.3	2.58	0.0568	0.42
ethanol	11	318.8	323.1	319.0	1.35	0.0715	0.83
	16	319.0	323.4	319.3	1.38	0.0756	0.94
	33	320.7	325.5	321.4	1.50	0.0751	0.93
	35	321.7	326.6	321.6	1.52	0.0785	1.03
	36	321.6	324.4	321.7	0.87	0.1026	1.69
	46	322.3	328.0	322.7	1.77	0.0881	1.29
chloroform	3	317.0	323.1	316.7	1.92	0.0140	-0.77
	7	317.8	323.5	317.5	1.79	0.0171	-0.68
	9	318.0	325.4	317.9	2.33	0.0188	-0.63
	30	320.4	328.2	319.8	2.43	0.0198	-0.61
	41	322.2	329.4	321.4	2.23	0.0207	-0.58
	47	322.7	331.1	322.4	2.60	0.0246	-0.47
benzene	1	317.3	320.2	317.0	0.91	0.0210	-0.57
	5	317.0	321.4	317.6	1.39	0.0301	-0.32
	12	319.0	323.3	318.6	1.35	0.0296	-0.33
	22	319.6	324.2	319.2	1.44	0.0307	-0.30
	23	319.2	324.2	319.3	1.57	0.0355	-0.17
	42	321.4	328.0	321.7	2.05	0.0413	-0.01
acetone	49	323.0	334.1	323.4	3.44	0.0629	0.59
	50	323.4	334.0	323.8	3.28	0.0682	0.74
	51	323.8	334.0	324.1	3.15	0.0696	0.78
$\overline{S}$						0.0416	
σ						0.0360	

		Sensor Element #4					
Solvent	Exposure	Initial R	max R	final R	% change	*S*	*d*
toluene	2	457.2	458.6	457.3	0.31	0.0120	-0.20
	8	461.0	462.4	460.5	0.30	0.0110	-0.21
	19	462.9	464.3	462.7	0.30	0.0112	-0.21
	32	466.7	469.5	467.1	0.60	0.0214	-0.06
	37	466.4	469.7	467.1	0.71	0.0258	0.00
	44	469.5	472.0	469.6	0.53	0.0201	-0.08
methanol	4	459.9	461.5	459.6	0.35	0.0111	-0.21
	6	459.6	461.2	459.6	0.35	0.0116	-0.20
	13	462.7	464.3	462.6	0.35	0.0130	-0.18
	18	462.6	464.4	462.9	0.39	0.0130	-0.18
	26	464.0	465.7	464.1	0.37	0.0115	-0.21
	45	469.6	471.6	469.4	0.43	0.0136	-0.18
isopropanol	10	462.3	462.7	462.2	0.09	0.0152	-0.15
	14	462.6	463.1	462.7	0.11	0.0181	-0.11
	17	462.6	463.1	462.6	0.11	0.0164	-0.13
	20	462.7	463.2	462.9	0.11	0.0151	-0.15
	38	467.1	467.2	466.4	0.02	0.0033	-0.33
	40	466.9	467.4	467.2	0.11	0.0278	0.03
hexane	15	462.7	463.5	462.8	0.17	0.0103	-0.22
	24	464.6	465.9	464.5	0.28	0.0157	-0.14
	29	464.4	465.5	464.7	0.24	0.0146	-0.16
	31	466.7	468.5	466.7	0.39	0.0214	-0.06
	39	466.4	467.9	466.9	0.32	0.0208	-0.07
	48	470.4	471.9	470.4	0.32	0.0181	-0.11
ethyl acetate	21	462.9	466.3	463.9	0.73	0.0253	0.00
	25	464.5	468.1	464.0	0.78	0.0270	0.02
	27	464.1	468.0	465.3	0.84	0.0296	0.06
	28	465.3	468.5	464.4	0.69	0.0267	0.02
	34	467.0	470.9	467.0	0.84	0.0298	0.06
	43	469.1	472.6	469.5	0.75	0.0239	-0.02
ethanol	11	462.2	462.9	462.4	0.15	0.0116	-0.20
	16	462.8	463.2	462.6	0.09	0.0069	-0.27
	33	467.1	467.6	467.0	0.11	0.0078	-0.26
	35	467.0	467.4	466.7	0.09	0.0064	-0.28
	36	466.7	466.9	466.4	0.04	0.0073	-0.27
	46	469.4	470.3	469.1	0.19	0.0139	-0.17
chloroform	3	457.3	462.0	459.9	1.03	0.0108	-0.22
	7	459.6	462.9	461.0	0.72	0.0099	-0.23
	9	460.5	464.8	462.3	0.93	0.0109	-0.21
	30	464.7	470.4	466.7	1.23	0.0145	-0.16
	41	467.2	472.3	469.0	1.09	0.0147	-0.16
	47	469.1	473.8	470.4	1.00	0.0138	-0.17
benzene	1	456.8	458.6	457.2	0.39	0.0130	-0.18
	5	459.6	461.9	459.6	0.50	0.0157	-0.14
	12	462.4	464.6	462.7	0.48	0.0151	-0.15
	22	463.9	466.2	464.4	0.50	0.0154	-0.15
	23	464.4	466.7	464.6	0.50	0.0163	-0.13
	42	469.0	472.2	469.1	0.68	0.0200	-0.08
acetone	49	470.4	473.9	470.4	0.74	0.0198	-0.08
	50	470.4	473.6	469.8	0.68	0.0206	-0.07
	51	469.8	472.5	469.8	0.57	0.0184	-0.10
$\overline{S}$						0.0255	
σ						0.0681	

		Sensor Element #5					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	347.6	347.8	347.6	0.06	0.0017	-0.52
	8	347.9	348.0	347.7	0.03	0.0008	-0.63
	19	347.7	347.8	347.7	0.03	0.0008	-0.63
	32	348.0	348.3	347.9	0.09	0.0023	-0.44
	37	347.8	348.0	347.9	0.06	0.0016	-0.54
	44	348.0	348.2	348.0	0.06	0.0016	-0.53
methanol	4	347.8	351.6	347.6	1.09	0.0264	2.63
	6	347.7	351.4	347.8	1.06	0.0268	2.67
	13	347.7	351.3	347.7	1.04	0.0293	2.99
	18	347.7	351.4	347.7	1.06	0.0267	2.67
	26	347.9	351.7	347.9	1.09	0.0256	2.52
	45	348.0	351.5	347.9	1.01	0.0237	2.28
isopropanol	10	348.0	348.2	347.6	0.06	0.0076	0.23
	14	347.7	347.8	347.7	0.03	0.0036	-0.28
	17	347.9	348.0	347.7	0.03	0.0033	-0.32
	20	347.7	347.8	347.7	0.03	0.0030	-0.35
	38	347.9	347.9	347.9	0.00	0.0000	-0.73
	40	347.9	348.0	347.8	0.03	0.0056	-0.03
hexane	15	347.7	347.8	347.6	0.03	0.0013	-0.57
	24	347.9	347.9	347.8	0.00	0.0000	-0.73
	29	347.7	347.7	347.7	0.00	0.0000	-0.73
	31	348.1	348.2	348.0	0.03	0.0012	-0.58
	39	347.9	347.9	347.9	0.00	0.0000	-0.73
	48	348.0	348.1	348.0	0.03	0.0012	-0.58
ethyl acetate	21	347.7	348.2	347.8	0.14	0.0037	-0.26
	25	347.8	348.2	347.9	0.12	0.0030	-0.35
	27	347.9	348.3	347.8	0.11	0.0030	-0.35
	28	347.8	348.3	347.7	0.14	0.0042	-0.20
	34	347.8	348.3	347.8	0.14	0.0038	-0.25
	43	347.9	348.6	348.0	0.20	0.0048	-0.13
ethanol	11	347.6	348.0	347.7	0.12	0.0067	0.11
	16	347.6	348.0	347.9	0.12	0.0069	0.14
	33	347.9	348.2	347.8	0.09	0.0047	-0.14
	35	347.8	348.1	347.9	0.09	0.0048	-0.12
	36	347.9	348.1	347.8	0.06	0.0073	0.20
	46	347.9	348.2	347.9	0.09	0.0046	-0.14
chloroform	3	347.6	348.6	347.8	0.29	0.0023	-0.44
	7	347.8	348.7	347.9	0.26	0.0027	-0.39
	9	347.7	349.1	348.0	0.40	0.0036	-0.28
	30	347.7	349.4	348.1	0.49	0.0043	-0.19
	41	347.8	349.0	347.9	0.35	0.0035	-0.30
	47	347.9	349.2	348.0	0.37	0.0038	-0.25
benzene	1	347.5	347.8	347.6	0.09	0.0022	-0.46
	5	347.6	348.0	347.7	0.12	0.0027	-0.39
	12	347.7	347.9	347.7	0.06	0.0014	-0.56
	22	347.8	348.1	347.8	0.09	0.0020	-0.48
	23	347.8	348.1	347.9	0.09	0.0021	-0.46
	42	347.9	348.4	347.9	0.14	0.0031	-0.34
acetone	49	348.0	348.7	347.9	0.20	0.0040	-0.23
	50	347.9	348.6	348.0	0.20	0.0045	-0.16
	51	348.0	348.6	348.0	0.17	0.0041	-0.21
$\overline{S}$						0.0058	
σ						0.0079	

		Sensor Element #6					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	128.2	128.9	128.2	0.55	0.0060	-0.63
	8	131.6	132.5	131.0	0.68	0.0071	-0.61
	19	132.0	132.9	131.6	0.68	0.0072	-0.61
	32	131.9	132.7	131.8	0.61	0.0061	-0.63
	37	131.9	132.8	131.9	0.68	0.0070	-0.62
	44	132.1	132.9	132.1	0.61	0.0064	-0.63
methanol	4	129.3	151.8	131.1	17.40	0.1565	1.74
	6	130.1	152.4	130.0	17.14	0.1612	1.81
	13	131.0	149.0	131.6	13.74	0.1465	1.58
	18	131.5	152.1	132.0	15.67	0.1488	1.62
	26	131.0	153.4	132.2	17.10	0.1509	1.65
	45	132.1	152.7	132.8	15.59	0.1396	1.47
isopropanol	10	132.1	133.8	130.6	1.29	0.0644	0.29
	14	131.6	134.2	131.7	1.98	0.0939	0.75
	17	131.9	134.6	131.5	2.05	0.0888	0.67
	20	131.6	134.4	131.8	2.13	0.0843	0.60
	38	131.9	133.8	131.9	1.44	0.0629	0.26
	40	131.8	133.0	131.8	0.91	0.0667	0.32
hexane	15	131.7	132.0	131.4	0.23	0.0038	-0.67
	24	131.5	131.8	131.5	0.23	0.0036	-0.67
	29	130.9	131.0	130.9	0.08	0.0013	-0.71
	31	132.2	132.5	131.9	0.23	0.0036	-0.67
	39	131.9	132.1	131.8	0.15	0.0028	-0.68
	48	134.3	134.6	133.7	0.22	0.0036	-0.67
ethyl acetate	21	131.8	134.7	131.5	2.20	0.0216	-0.39
	25	131.5	133.8	131.0	1.75	0.0172	-0.46
	27	132.2	136.1	132.4	2.95	0.0296	-0.26
	28	132.4	135.1	130.9	2.04	0.0226	-0.37
	34	132.1	134.8	132.1	2.04	0.0206	-0.40
	43	132.3	134.7	132.1	1.81	0.0164	-0.47
ethanol	11	130.6	138.5	131.1	6.05	0.1314	1.34
	16	131.4	139.9	131.9	6.47	0.1460	1.57
	33	131.8	139.8	132.1	6.07	0.1252	1.25
	35	132.1	139.4	132.0	5.53	0.1170	1.12
	36	132.0	135.7	131.9	2.80	0.1355	1.41
	46	132.8	142.6	133.2	7.38	0.1515	1.66
chloroform	3	128.2	133.7	129.3	4.29	0.0126	-0.53
	7	130.0	138.0	131.6	6.15	0.0240	-0.35
	9	131.0	139.7	132.1	6.64	0.0221	-0.38
	30	130.9	139.3	132.2	6.42	0.0213	-0.39
	41	131.8	138.6	132.5	5.16	0.0196	-0.42
	47	133.2	142.6	134.3	7.06	0.0275	-0.29
benzene	1	128.2	129.2	128.2	0.78	0.0072	-0.61
	5	131.1	132.7	130.1	1.22	0.0109	-0.55
	12	131.1	132.6	131.0	1.14	0.0103	-0.56
	22	131.5	132.7	131.6	0.91	0.0080	-0.60
	23	131.6	132.6	131.5	0.76	0.0071	-0.61
	42	132.5	134.1	132.3	1.21	0.0100	-0.57
acetone	49	133.7	137.5	133.1	2.84	0.0215	-0.39
	50	133.1	136.8	132.9	2.78	0.0238	-0.35
	51	132.9	136.4	132.8	2.63	0.0239	-0.35
$\overline{S}$						0.0461	
σ						0.0635	

		Sensor Element #7					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	563.0	569.4	563.4	1.14	0.0548	-0.91
	8	567.0	579.0	568.5	2.12	0.0946	-0.07
	19	572.8	582.9	573.4	1.76	0.0809	-0.36
	32	580.7	593.5	581.1	2.20	0.0980	0.00
	37	584.8	596.9	585.1	2.07	0.0945	-0.07
	44	591.2	604.0	591.8	2.17	0.1027	0.10
methanol	4	565.4	573.3	565.0	1.40	0.0549	-0.91
	6	565.0	572.6	565.7	1.35	0.0550	-0.91
	13	572.4	578.9	572.3	1.14	0.0529	-0.95
	18	572.9	579.5	572.8	1.15	0.0477	-1.06
	26	578.9	586.3	579.2	1.28	0.0499	-1.02
	45	591.8	599.0	591.2	1.22	0.0488	-1.04
isopropanol	10	572.2	575.9	571.6	0.65	0.1402	0.89
	14	572.3	576.1	572.8	0.66	0.1372	0.83
	17	573.3	577.2	572.9	0.68	0.1281	0.64
	20	573.4	577.4	573.4	0.70	0.1205	0.47
	38	585.1	589.3	584.8	0.72	0.1391	0.87
	40	585.1	587.6	585.1	0.43	0.1389	0.86
hexane	15	572.8	577.2	573.0	0.77	0.0564	-0.88
	24	576.4	582.2	577.0	1.01	0.0700	-0.59
	29	579.8	583.8	580.5	0.69	0.0533	-0.94
	31	580.1	587.5	580.7	1.28	0.0881	-0.21
	39	584.8	590.0	585.1	0.89	0.0721	-0.55
	48	589.9	596.6	590.5	1.14	0.0810	-0.36
ethyl acetate	21	573.4	593.4	575.5	3.49	0.1488	1.07
	25	577.0	598.0	578.9	3.64	0.1574	1.25
	27	579.2	596.5	581.0	2.99	0.1314	0.70
	28	581.0	599.0	579.8	3.10	0.1504	1.11
	34	583.4	606.9	586.2	4.03	0.1797	1.72
	43	586.4	614.7	591.2	4.83	0.1936	2.02
ethanol	11	571.6	577.0	572.0	0.94	0.0899	-0.17
	16	573.0	578.5	573.3	0.96	0.0945	-0.07
	33	581.1	587.7	583.4	1.14	0.1033	0.11
	35	586.2	592.3	585.3	1.04	0.0978	-0.01
	36	585.3	588.3	584.8	0.51	0.1099	0.25
	46	591.2	597.3	591.2	1.03	0.0943	-0.08
chloroform	3	563.4	584.6	565.4	3.76	0.0487	-1.04
	7	565.7	585.5	567.0	3.50	0.0595	-0.81
	9	568.5	592.4	572.2	4.20	0.0608	-0.78
	30	580.5	602.7	580.1	3.82	0.0563	-0.88
	41	585.1	606.8	585.3	3.71	0.0624	-0.75
	47	591.2	612.8	589.9	3.65	0.0633	-0.73
benzene	1	562.3	570.7	563.0	1.49	0.0608	-0.79
	5	565.0	578.0	565.0	2.30	0.0889	-0.19
	12	572.0	585.4	572.4	2.34	0.0922	-0.12
	22	575.5	589.7	576.4	2.47	0.0949	-0.06
	23	576.4	589.5	576.4	2.27	0.0930	-0.11
	42	585.3	602.3	586.4	2.90	0.1064	0.18
acetone	49	590.5	630.1	599.2	6.71	0.2245	2.67
	50	599.2	630.8	600.6	5.27	0.2032	2.22
	51	600.6	629.9	601.2	4.88	0.2000	2.15
$\overline{S}$						0.0980	
σ						0.0474	

Sensor Element #8							
Solvent	Exposure	initial R	max R	final R	% change	S	d
toluene	2	334.2	342.0	334.4	2.33	0.0668	-0.13
	8	343.4	351.7	342.3	2.42	0.0655	-0.17
	19	342.1	351.4	342.8	2.72	0.0745	0.08
	32	349.5	357.9	346.9	2.40	0.0643	-0.20
	37	349.5	356.6	347.3	2.03	0.0555	-0.46
	44	353.8	361.7	351.6	2.23	0.0634	-0.23
methanol	4	343.9	347.0	342.9	0.90	0.0216	-1.42
	6	340.7	343.3	339.7	0.76	0.0188	-1.50
	13	343.1	345.8	342.7	0.79	0.0220	-1.41
	18	342.5	345.3	342.1	0.82	0.0202	-1.46
	26	347.4	350.2	346.2	0.81	0.0189	-1.50
	45	351.6	354.6	350.6	0.85	0.0203	-1.46
isopropanol	10	347.9	349.7	345.0	0.52	0.0682	-0.09
	14	342.7	344.5	342.6	0.53	0.0650	-0.19
	17	342.6	344.4	342.5	0.53	0.0591	-0.35
	20	342.8	344.6	342.6	0.53	0.0542	-0.49
	38	347.3	349.5	346.7	0.63	0.0728	0.04
	40	346.3	347.8	345.9	0.43	0.0833	0.34
hexane	15	342.6	347.4	342.7	1.40	0.0615	-0.28
	24	344.8	350.4	344.8	1.62	0.0676	-0.11
	29	345.0	349.4	345.0	1.28	0.0586	-0.37
	31	351.3	356.0	349.5	1.34	0.0560	-0.44
	39	346.7	351.2	346.3	1.30	0.0624	-0.26
	48	354.4	360.3	353.4	1.66	0.0713	0.00
ethyl acetate	21	342.6	361.8	347.1	5.60	0.1429	2.03
	25	344.8	363.9	347.4	5.54	0.1432	2.04
	27	346.2	363.2	348.6	4.91	0.1291	1.64
	28	348.6	363.0	345.0	4.13	0.1203	1.39
	34	351.5	366.6	351.8	4.30	0.1154	1.25
	43	351.2	370.2	353.8	5.41	0.1300	1.67
ethanol	11	345.0	347.7	344.7	0.78	0.0449	-0.76
	16	342.7	345.5	342.6	0.82	0.0481	-0.67
	33	346.9	350.0	351.5	0.89	0.0485	-0.66
	35	351.8	354.6	350.1	0.80	0.0449	-0.76
	36	350.1	351.2	349.5	0.31	0.0403	-0.89
	46	350.6	353.3	349.8	0.77	0.0417	-0.85
chloroform	3	334.4	360.3	343.9	7.75	0.0594	-0.34
	7	339.7	359.3	343.4	5.77	0.0589	-0.36
	9	342.3	365.9	347.9	6.89	0.0601	-0.33
	30	345.0	370.2	351.3	7.30	0.0639	-0.22
	41	345.9	371.2	352.9	7.31	0.0728	0.04
	47	349.8	373.8	354.4	6.86	0.0703	-0.03
benzene	1	332.5	343.7	334.2	3.37	0.0810	0.27
	5	342.9	352.0	340.7	2.65	0.0622	-0.26
	12	344.7	355.4	343.1	3.10	0.0736	0.06
	22	347.1	357.7	345.3	3.05	0.0709	-0.02
	23	345.3	356.7	344.8	3.30	0.0809	0.27
	42	352.9	363.5	351.2	3.00	0.0664	-0.15
acetone	49	353.4	376.0	355.8	6.40	0.1281	1.61
	50	355.8	374.8	355.0	5.34	0.1222	1.45
	51	355.0	373.5	355.3	5.21	0.1263	1.56
$\overline{S}$						0.0715	
σ						0.0351	

		Sensor Element #9					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	260.6	260.8	260.6	0.08	0.0017	-0.64
	8	261.8	262.1	261.7	0.11	0.0024	-0.59
	19	263.1	263.1	262.9	0.00	0.0000	-0.76
	32	262.8	263.0	262.8	0.08	0.0015	-0.65
	37	263.0	263.2	262.9	0.08	0.0016	-0.65
	44	262.4	262.7	262.3	0.11	0.0024	-0.59
methanol	4	260.7	267.6	261.8	2.65	0.0480	2.68
	6	261.7	267.6	261.7	2.25	0.0427	2.30
	13	261.7	267.6	262.4	2.25	0.0480	2.68
	18	262.2	268.2	263.1	2.29	0.0434	2.35
	26	262.5	268.6	263.3	2.32	0.0411	2.19
	45	262.3	268.7	263.9	2.44	0.0434	2.35
isopropanol	10	262.0	262.2	261.7	0.08	0.0076	-0.22
	14	262.4	262.6	262.3	0.08	0.0072	-0.24
	17	262.3	262.5	262.2	0.08	0.0066	-0.29
	20	262.9	263.1	262.8	0.08	0.0060	-0.33
	38	262.9	263.0	262.6	0.04	0.0033	-0.52
	40	262.6	262.7	262.5	0.04	0.0056	-0.36
hexane	15	262.3	262.5	262.3	0.08	0.0026	-0.57
	24	262.6	262.7	262.6	0.04	0.0012	-0.67
	29	262.9	263.0	262.9	0.04	0.0013	-0.66
	31	262.8	262.9	262.8	0.04	0.0012	-0.67
	39	262.6	262.7	262.6	0.04	0.0014	-0.66
	48	263.5	263.5	263.3	0.00	0.0000	-0.76
ethyl acetate	21	262.8	263.7	262.6	0.34	0.0067	-0.28
	25	262.6	263.7	262.5	0.42	0.0082	-0.17
	27	263.3	264.4	263.1	0.42	0.0084	-0.16
	28	263.1	264.2	262.9	0.42	0.0092	-0.10
	34	262.8	263.8	262.8	0.38	0.0076	-0.21
	43	262.6	263.6	262.4	0.38	0.0068	-0.27
ethanol	11	261.7	263.2	261.9	0.57	0.0250	1.03
	16	262.3	263.4	262.3	0.42	0.0189	0.60
	33	262.8	263.9	262.8	0.42	0.0172	0.48
	35	262.8	264.2	263.0	0.53	0.0224	0.85
	36	263.0	263.6	263.0	0.23	0.0220	0.82
	46	263.9	264.7	263.6	0.30	0.0124	0.13
chloroform	3	260.6	261.2	260.7	0.23	0.0014	-0.66
	7	261.7	262.5	261.8	0.31	0.0024	-0.59
	9	261.7	262.6	262.0	0.34	0.0023	-0.59
	30	262.9	263.5	262.8	0.23	0.0015	-0.65
	41	262.5	263.1	262.6	0.23	0.0017	-0.63
	47	263.6	264.2	263.5	0.23	0.0018	-0.63
benzene	1	260.5	260.8	260.6	0.12	0.0022	-0.60
	5	261.8	262.1	261.7	0.11	0.0021	-0.61
	12	261.9	262.1	261.7	0.08	0.0014	-0.66
	22	262.6	263.0	262.8	0.15	0.0027	-0.57
	23	262.8	263.0	262.6	0.08	0.0014	-0.66
	42	262.6	262.9	262.6	0.11	0.0019	-0.62
acetone	49	263.3	265.2	263.3	0.72	0.0108	0.01
	50	263.3	265.4	263.2	0.80	0.0135	0.21
	51	263.2	265.3	263.2	0.80	0.0143	0.27
$\overline{S}$						0.0106	
σ						0.0139	

		Sensor Element #10					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	239.3	241.8	239.3	1.04	0.0214	-1.10
	8	239.0	242.3	238.6	1.38	0.0260	-0.89
	19	240.5	243.9	240.1	1.41	0.0272	-0.84
	32	240.3	244.1	239.5	1.58	0.0291	-0.76
	37	241.4	245.5	240.8	1.70	0.0320	-0.63
	44	241.4	245.4	240.6	1.66	0.0321	-0.62
methanol	4	238.7	247.1	239.8	3.52	0.0584	0.54
	6	239.3	246.8	239.4	3.13	0.0542	0.35
	13	239.2	247.2	239.7	3.34	0.0651	0.84
	18	239.9	247.9	240.5	3.33	0.0578	0.51
	26	240.1	248.7	240.9	3.58	0.0580	0.52
	45	240.6	251.3	242.4	4.45	0.0725	1.16
isopropanol	10	238.5	239.9	238.6	0.59	0.0530	0.30
	14	239.7	241.5	239.5	0.75	0.0650	0.83
	17	239.7	241.4	239.9	0.71	0.0558	0.42
	20	240.1	241.7	239.7	0.67	0.0482	0.09
	38	240.8	242.5	240.1	0.71	0.0563	0.45
	40	240.3	241.4	240.3	0.46	0.0611	0.66
hexane	15	239.5	240.8	239.9	0.54	0.0167	-1.31
	24	238.9	240.8	239.0	0.80	0.0229	-1.03
	29	240.3	241.8	240.5	0.62	0.0200	-1.16
	31	240.1	242.3	240.3	0.92	0.0262	-0.89
	39	240.1	241.9	240.3	0.75	0.0250	-0.94
	48	241.1	243.3	240.8	0.91	0.0266	-0.87
ethyl acetate	21	239.7	248.3	239.8	3.59	0.0640	0.79
	25	239.0	249.4	240.1	4.35	0.0780	1.40
	27	240.9	249.7	240.8	3.65	0.0668	0.91
	28	240.8	249.7	240.3	3.70	0.0744	1.24
	34	240.6	250.7	241.7	4.20	0.0772	1.37
	43	239.2	251.0	241.4	4.93	0.0807	1.53
ethanol	11	238.6	242.9	239.6	1.80	0.0715	1.12
	16	239.9	243.4	239.7	1.46	0.0601	0.62
	33	239.5	244.0	240.6	1.88	0.0704	1.07
	35	241.7	246.7	242.0	2.07	0.0801	1.50
	36	242.0	243.4	241.4	0.58	0.0513	0.22
	46	242.4	247.4	241.7	2.06	0.0773	1.37
chloroform	3	239.3	247.1	238.7	3.26	0.0179	-1.25
	7	239.4	246.6	239.0	3.01	0.0216	-1.09
	9	238.6	247.0	238.5	3.52	0.0214	-1.10
	30	240.5	247.5	240.1	2.91	0.0178	-1.26
	41	240.3	249.6	239.7	3.87	0.0267	-0.86
	47	241.7	251.3	241.1	3.97	0.0281	-0.80
benzene	1	239.1	243.4	239.3	1.80	0.0311	-0.67
	5	239.8	244.4	239.3	1.92	0.0314	-0.65
	12	239.6	243.7	239.2	1.71	0.0282	-0.80
	22	239.8	244.4	239.2	1.92	0.0307	-0.68
	23	239.2	243.9	238.9	1.96	0.0334	-0.57
	42	239.7	245.5	239.2	2.42	0.0363	-0.44
acetone	49	240.8	255.6	245.8	6.15	0.0839	1.67
	50	245.8	257.1	247.3	4.60	0.0727	1.17
	51	247.3	257.4	248.2	4.08	0.0689	1.01
$\overline{S}$						0.0462	
σ						0.0226	

		Sensor Element #11					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	334.0	336.7	334.6	0.81	0.0231	-0.80
	8	336.5	343.7	336.7	2.14	0.0568	0.03
	19	336.5	340.1	337.2	1.07	0.0288	-0.66
	32	338.4	343.3	338.9	1.45	0.0375	-0.45
	37	338.5	342.4	339.4	1.15	0.0305	-0.62
	44	339.3	344.1	340.0	1.41	0.0385	-0.42
methanol	4	335.8	343.8	335.5	2.38	0.0556	0.00
	6	335.3	342.7	335.2	2.21	0.0535	-0.05
	13	336.5	342.6	336.4	1.81	0.0496	-0.15
	18	336.4	343.2	336.5	2.02	0.0491	-0.16
	26	336.8	344.0	337.0	2.14	0.0485	-0.17
	45	340.0	346.9	339.8	2.03	0.0467	-0.22
isopropanol	10	336.7	340.1	335.2	1.01	0.1288	1.81
	14	336.4	339.0	336.5	0.77	0.0939	0.95
	17	336.7	339.4	336.4	0.80	0.0886	0.82
	20	337.2	340.0	337.2	0.83	0.0843	0.71
	38	339.4	341.9	339.0	0.74	0.0828	0.67
	40	339.1	340.8	339.1	0.50	0.0944	0.96
hexane	15	336.5	338.5	336.7	0.59	0.0256	-0.74
	24	337.8	340.1	338.1	0.68	0.0278	-0.69
	29	336.7	338.0	337.1	0.39	0.0173	-0.94
	31	338.2	341.4	338.4	0.95	0.0381	-0.43
	39	339.0	340.8	339.1	0.53	0.0250	-0.76
	48	339.9	342.8	339.9	0.85	0.0351	-0.51
ethyl acetate	21	337.2	349.2	336.8	3.56	0.0893	0.83
	25	338.1	349.3	336.8	3.31	0.0840	0.70
	27	337.0	349.1	337.9	3.59	0.0919	0.90
	28	337.9	349.1	336.7	3.31	0.0936	0.94
	34	338.7	350.7	339.0	3.54	0.0917	0.89
	43	339.8	351.5	339.3	3.44	0.0800	0.60
ethanol	11	335.2	340.5	335.7	1.58	0.0882	0.81
	16	336.7	341.3	336.7	1.37	0.0790	0.58
	33	338.9	343.8	338.7	1.45	0.0767	0.52
	35	339.0	344.3	338.5	1.56	0.0849	0.73
	36	338.5	341.0	338.5	0.74	0.0916	0.89
	46	339.8	344.5	339.6	1.38	0.0726	0.42
chloroform	3	334.6	361.6	335.8	8.07	0.0620	0.16
	7	335.2	357.1	336.5	6.53	0.0658	0.25
	9	336.7	362.3	336.7	7.60	0.0652	0.24
	30	337.1	357.7	338.2	6.11	0.0522	-0.08
	41	339.1	355.9	339.3	4.95	0.0483	-0.18
	47	339.6	356.5	339.9	4.98	0.0495	-0.15
benzene	1	333.3	336.5	334.0	0.96	0.0232	-0.80
	5	335.5	343.6	335.3	2.41	0.0554	0.00
	12	335.7	341.5	336.5	1.73	0.0399	-0.39
	22	336.8	342.7	337.7	1.75	0.0394	-0.40
	23	337.7	342.9	337.8	1.54	0.0369	-0.46
	42	339.3	346.2	339.8	2.03	0.0432	-0.30
acetone	49	339.9	351.9	339.2	3.53	0.0680	0.31
	50	339.2	351.2	339.2	3.54	0.0772	0.53
	51	339.2	350.6	339.5	3.36	0.0778	0.55
$\overline{S}$						0.0555	
σ						0.0405	

		Sensor Element #12					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	271.5	271.9	271.6	0.15	0.0034	-0.14
	8	272.1	272.2	271.8	0.04	0.0008	-0.23
	19	272.4	272.7	272.3	0.11	0.0024	-0.17
	32	271.6	271.8	271.8	0.07	0.0015	-0.20
	37	272.1	272.3	272.1	0.07	0.0016	-0.20
	44	272.1	272.3	272.1	0.07	0.0016	-0.20
methanol	4	271.7	279.2	272.9	2.76	0.0522	1.55
	6	271.7	279.0	271.7	2.69	0.0528	1.58
	13	271.8	277.2	272.0	1.99	0.0439	1.27
	18	272.0	278.2	272.4	2.28	0.0448	1.30
	26	271.9	278.1	272.5	2.28	0.0418	1.19
	45	272.1	277.1	272.5	1.84	0.0339	0.92
isopropanol	10	271.9	272.2	271.5	0.11	0.0114	0.14
	14	272.0	272.1	271.9	0.04	0.0036	-0.13
	17	272.3	272.5	272.0	0.06	0.0049	-0.09
	20	272.3	272.5	272.4	0.07	0.0060	-0.05
	38	272.1	272.4	272.2	0.11	0.0099	0.09
	40	272.1	272.4	272.2	0.11	0.0167	0.32
hexane	15	271.9	272.0	271.7	0.04	0.0013	-0.21
	24	272.3	272.4	272.4	0.04	0.0012	-0.21
	29	271.7	271.7	271.7	0.00	0.0000	-0.26
	31	271.7	271.8	271.6	0.04	0.0012	-0.21
	39	272.2	272.2	272.1	0.00	0.0000	-0.26
	48	272.7	272.7	272.6	0.00	0.0000	-0.26
ethyl acetate	21	272.4	273.2	272.3	0.29	0.0060	-0.05
	25	272.4	273.1	271.9	0.26	0.0052	-0.07
	27	272.5	273.7	272.7	0.44	0.0091	0.06
	28	272.7	273.7	271.7	0.37	0.0084	0.03
	34	272.1	272.8	272.0	0.26	0.0054	-0.07
	43	272.1	272.8	272.1	0.26	0.0048	-0.09
ethanol	11	271.5	273.1	271.9	0.59	0.0266	0.67
	16	271.7	273.3	272.3	0.59	0.0275	0.70
	33	271.8	273.0	272.1	0.44	0.0188	0.40
	35	272.0	273.0	272.0	0.37	0.0160	0.30
	36	272.0	272.7	272.1	0.26	0.0256	0.63
	46	272.5	273.7	272.7	0.44	0.0185	0.39
chloroform	3	271.6	272.2	271.7	0.22	0.0014	-0.21
	7	271.7	272.2	272.1	0.18	0.0015	-0.20
	9	271.8	272.3	271.9	0.18	0.0013	-0.21
	30	271.7	272.2	271.7	0.18	0.0013	-0.21
	41	272.2	272.4	272.1	0.07	0.0006	-0.24
	47	272.7	273.0	272.7	0.11	0.0009	-0.23
benzene	1	271.6	271.9	271.5	0.11	0.0022	-0.18
	5	272.9	273.1	271.7	0.07	0.0014	-0.21
	12	271.9	272.1	271.8	0.07	0.0014	-0.21
	22	272.3	272.6	272.4	0.11	0.0020	-0.19
	23	272.4	272.5	272.3	0.04	0.0007	-0.23
	42	272.1	272.3	272.1	0.07	0.0013	-0.21
acetone	49	272.6	273.9	272.6	0.48	0.0074	0.00
	50	272.6	274.1	272.7	0.55	0.0096	0.08
	51	272.7	274.1	273.0	0.51	0.0096	0.08
$\overline{S}$						0.0074	
σ						0.0288	

		Sensor Element #13					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	678.9	679.6	678.8	0.10	0.0060	-0.20
	8	679.4	679.8	680.0	0.06	0.0032	-0.32
	19	681.5	681.8	681.0	0.04	0.0024	-0.35
	32	680.1	680.8	680.8	0.10	0.0054	-0.23
	37	679.9	680.4	679.9	0.07	0.0039	-0.29
	44	680.2	680.5	680.4	0.04	0.0024	-0.35
methanol	4	678.9	684.0	680.4	0.75	0.0355	0.98
	6	679.7	684.7	679.3	0.74	0.0362	1.01
	13	679.6	684.7	681.1	0.75	0.0415	1.22
	18	679.9	685.6	681.5	0.84	0.0412	1.21
	26	679.9	684.9	681.6	0.74	0.0337	0.91
	45	680.4	685.4	682.1	0.73	0.0339	0.92
isopropanol	10	679.5	679.6	679.7	0.01	0.0038	-0.29
	14	681.1	681.2	681.0	0.01	0.0036	-0.30
	17	680.9	681.0	679.9	0.01	0.0033	-0.31
	20	681.0	681.1	680.8	0.01	0.0030	-0.32
	38	679.9	680.3	680.2	0.06	0.0132	0.09
	40	680.1	680.4	680.0	0.04	0.0167	0.23
hexane	15	681.0	681.4	680.8	0.06	0.0051	-0.24
	24	680.5	680.9	681.0	0.06	0.0048	-0.25
	29	680.3	680.6	680.6	0.04	0.0040	-0.28
	31	680.0	680.4	680.1	0.06	0.0048	-0.25
	39	680.2	680.3	680.1	0.01	0.0014	-0.39
	48	681.4	682.1	681.6	0.10	0.0085	-0.10
ethyl acetate	21	680.8	681.3	680.7	0.07	0.0037	-0.29
	25	681.0	681.3	679.9	0.04	0.0022	-0.35
	27	681.6	681.9	680.1	0.04	0.0023	-0.35
	28	680.1	680.6	680.3	0.07	0.0042	-0.28
	34	680.7	681.1	680.5	0.06	0.0031	-0.32
	43	680.3	681.3	680.2	0.15	0.0068	-0.17
ethanol	11	679.7	680.3	680.1	0.09	0.0100	-0.04
	16	680.8	681.1	680.9	0.04	0.0052	-0.24
	33	680.8	680.9	680.7	0.01	0.0016	-0.38
	35	680.5	680.5	680.4	0.00	0.0000	-0.44
	36	680.4	680.7	679.9	0.04	0.0110	0.00
	46	682.1	681.9	681.4	-0.03	-0.0031	-0.57
chloroform	3	678.8	679.8	678.9	0.15	0.0023	-0.35
	7	679.3	680.1	679.4	0.12	0.0024	-0.35
	9	680.0	680.2	679.5	0.03	0.0005	-0.42
	30	680.6	681.0	680.0	0.06	0.0010	-0.40
	41	680.0	681.0	680.1	0.15	0.0029	-0.33
	47	681.4	681.6	681.4	0.03	0.0006	-0.42
benzene	1	679.1	679.5	678.9	0.06	0.0029	-0.33
	5	680.4	681.2	679.7	0.12	0.0055	-0.22
	12	680.1	680.3	679.6	0.03	0.0014	-0.39
	22	680.7	681.1	680.3	0.06	0.0027	-0.34
	23	680.3	681.1	680.5	0.12	0.0057	-0.22
	42	680.1	680.3	680.3	0.03	0.0013	-0.39
acetone	49	681.6	682.5	681.0	0.13	0.0051	-0.24
	50	681.0	681.3	681.0	0.04	0.0019	-0.37
	51	681.0	681.4	681.2	0.06	0.0027	-0.33
$\overline{S}$						0.0110	
σ						0.0249	

		Sensor Element #14					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	346.3	350.5	348.8	1.21	0.0360	0.01
	8	353.0	356.5	353.7	0.99	0.0276	-0.31
	19	355.4	358.2	356.0	0.79	0.0224	-0.51
	32	360.3	363.3	360.8	0.83	0.0230	-0.49
	37	361.6	365.0	362.2	0.94	0.0266	-0.35
	44	363.2	367.0	363.8	1.05	0.0305	-0.20
methanol	4	351.9	357.2	351.6	1.51	0.0369	0.04
	6	352.2	357.3	351.9	1.45	0.0369	0.04
	13	355.7	359.9	355.4	1.18	0.0342	-0.06
	18	355.5	360.5	355.4	1.41	0.0361	0.01
	26	358.6	363.5	358.3	1.37	0.0330	-0.11
	45	363.8	368.2	363.0	1.21	0.0298	-0.23
isopropanol	10	355.3	356.1	354.9	0.23	0.0303	-0.21
	14	355.4	356.2	355.4	0.23	0.0289	-0.26
	17	355.7	356.6	355.5	0.25	0.0295	-0.24
	20	356.0	357.0	356.1	0.28	0.0301	-0.22
	38	362.2	363.0	362.1	0.22	0.0265	-0.36
	40	362.0	362.4	361.8	0.11	0.0222	-0.52
hexane	15	355.4	356.2	355.5	0.23	0.0103	-0.98
	24	358.8	359.8	358.8	0.28	0.0121	-0.91
	29	359.5	360.0	359.6	0.14	0.0067	-1.11
	31	360.4	361.2	360.3	0.22	0.0095	-1.00
	39	362.1	362.8	362.0	0.19	0.0097	-1.00
	48	363.3	364.3	363.2	0.28	0.0121	-0.91
ethyl acetate	21	356.1	364.9	357.9	2.47	0.0655	1.13
	25	358.8	366.7	358.6	2.20	0.0592	0.90
	27	358.3	367.6	360.3	2.60	0.0706	1.33
	28	360.3	368.1	359.5	2.16	0.0652	1.12
	34	361.7	369.1	362.4	2.05	0.0566	0.79
	43	362.7	370.0	363.2	2.01	0.0499	0.54
ethanol	11	354.9	357.7	355.0	0.79	0.0466	0.41
	16	355.5	358.4	355.7	0.82	0.0498	0.54
	33	360.8	363.8	361.7	0.83	0.0469	0.43
	35	362.4	365.6	361.7	0.88	0.0513	0.59
	36	361.7	363.2	361.6	0.41	0.0549	0.73
	46	363.0	366.1	363.0	0.85	0.0479	0.46
chloroform	3	348.8	355.6	351.9	1.95	0.0156	-0.77
	7	351.9	355.9	353.0	1.14	0.0120	-0.91
	9	353.7	359.4	355.3	1.61	0.0145	-0.81
	30	359.6	364.0	360.4	1.22	0.0112	-0.94
	41	361.8	365.7	362.3	1.08	0.0112	-0.94
	47	363.0	367.1	363.3	1.13	0.0120	-0.91
benzene	1	344.7	347.9	346.3	0.93	0.0232	-0.48
	5	351.6	355.3	352.2	1.05	0.0253	-0.40
	12	355.0	358.2	355.7	0.90	0.0220	-0.53
	22	357.9	361.8	358.3	1.09	0.0261	-0.37
	23	358.3	362.1	358.8	1.06	0.0270	-0.34
	42	362.3	366.1	362.7	1.05	0.0238	-0.46
acetone	49	363.2	373.8	363.6	2.92	0.0601	0.93
	50	363.6	374.1	363.8	2.89	0.0675	1.21
	51	363.8	374.2	364.0	2.86	0.0710	1.35
$\overline{S}$						0.0358	
σ						0.0262	

		Sensor Element #15					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	358.6	373.7	358.9	4.21	0.1293	0.69
	8	381.3	398.4	380.4	4.48	0.1349	0.82
	19	383.9	400.4	384.2	4.30	0.1321	0.75
	32	390.6	407.4	390.3	4.30	0.1286	0.67
	37	389.4	405.5	389.5	4.13	0.1258	0.61
	44	392.7	408.5	392.3	4.02	0.1268	0.63
methanol	4	378.1	383.2	377.4	1.35	0.0355	-1.53
	6	376.6	381.1	376.4	1.19	0.0325	-1.60
	13	384.6	388.5	384.3	1.01	0.0317	-1.61
	18	383.8	388.2	383.9	1.15	0.0318	-1.61
	26	384.3	389.0	384.5	1.22	0.0317	-1.62
	45	392.3	397.4	392.1	1.30	0.0346	-1.55
isopropanol	10	386.5	389.5	384.2	0.78	0.1136	0.32
	14	384.3	387.8	384.2	0.91	0.1264	0.62
	17	384.0	388.1	383.8	1.07	0.1345	0.81
	20	384.2	388.9	384.4	1.22	0.1416	0.98
	38	389.5	393.4	389.4	1.00	0.1291	0.68
	40	389.4	391.4	389.2	0.51	0.1111	0.26
hexane	15	384.2	388.7	384.1	1.17	0.0577	-1.00
	24	384.7	389.9	384.6	1.35	0.0628	-0.88
	29	384.4	388.4	384.3	1.04	0.0533	-1.11
	31	390.9	395.8	390.6	1.25	0.0583	-0.99
	39	389.4	393.7	389.4	1.10	0.0596	-0.96
	48	394.9	399.8	394.6	1.24	0.0593	-0.96
ethyl acetate	21	384.4	397.8	384.3	3.49	0.0997	-0.01
	25	384.6	397.8	384.3	3.43	0.0990	-0.03
	27	384.5	397.2	384.8	3.30	0.0964	-0.09
	28	384.8	396.3	384.4	2.99	0.0961	-0.10
	34	390.0	402.3	389.8	3.15	0.0940	-0.14
	43	392.5	406.6	392.7	3.59	0.0964	-0.09
ethanol	11	384.2	388.3	384.3	1.07	0.0682	-0.75
	16	384.1	388.3	384.0	1.09	0.0722	-0.66
	33	390.3	395.0	390.0	1.20	0.0736	-0.63
	35	389.8	394.2	389.8	1.13	0.0705	-0.70
	36	389.8	391.3	389.4	0.38	0.0549	-1.07
	46	392.1	396.4	391.7	1.10	0.0665	-0.79
chloroform	3	358.9	431.0	378.1	20.09	0.1655	1.54
	7	376.4	429.2	381.3	14.03	0.1587	1.38
	9	380.4	441.8	386.5	16.14	0.1563	1.33
	30	384.3	447.9	390.9	16.55	0.1613	1.44
	41	389.2	444.8	392.7	14.29	0.1599	1.41
	47	391.7	445.7	394.9	13.79	0.1583	1.37
benzene	1	357.3	375.5	358.6	5.09	0.1317	0.74
	5	377.4	397.8	376.6	5.41	0.1394	0.93
	12	384.3	404.2	384.6	5.18	0.1370	0.87
	22	384.3	404.7	384.5	5.31	0.1364	0.85
	23	384.5	404.2	384.7	5.12	0.1398	0.94
	42	392.7	415.4	392.5	5.78	0.1421	0.99
acetone	49	394.6	407.7	394.4	3.32	0.0743	-0.61
	50	394.4	405.6	394.3	2.84	0.0720	-0.66
	51	394.3	404.8	394.3	2.66	0.0717	-0.67
$\bar{S}$						0.1001	
σ						0.0424	

		Sensor Element #16					
Solvent	Exposure	Initial R	max R	final R	% change	*S*	*d*
toluene	2	300.9	361.9	300.2	20.27	0.5223	1.10
	8	313.4	369.8	306.0	18.00	0.4448	0.73
	19	304.7	366.2	303.1	20.18	0.4924	0.96
	32	308.9	368.1	304.4	19.16	0.4533	0.77
	37	301.8	362.0	300.8	19.95	0.4703	0.85
	44	301.7	355.9	300.0	17.96	0.4350	0.69
methanol	4	315.3	318.8	313.2	1.11	0.0243	-1.25
	6	306.5	309.0	305.9	0.82	0.0181	-1.28
	13	306.5	308.7	306.1	0.72	0.0179	-1.28
	18	305.0	307.4	304.7	0.79	0.0173	-1.28
	26	300.2	303.1	300.3	0.97	0.0195	-1.27
	45	300.0	303.4	300.0	1.13	0.0230	-1.25
isopropanol	10	313.2	317.8	308.9	1.47	0.1742	-0.54
	14	306.1	310.4	305.8	1.40	0.1552	-0.63
	17	305.1	310.3	305.0	1.71	0.1711	-0.56
	20	303.1	309.2	302.8	2.01	0.1837	-0.50
	38	300.8	306.2	300.7	1.80	0.1788	-0.52
	40	300.9	303.6	300.6	0.90	0.1500	-0.66
hexane	15	305.8	356.6	305.5	16.61	0.6513	1.71
	24	301.4	351.9	301.6	16.76	0.6099	1.51
	29	299.7	350.4	301.4	16.92	0.6751	1.82
	31	313.0	362.4	308.9	15.78	0.5881	1.41
	39	300.7	345.3	300.9	14.83	0.6186	1.55
	48	307.3	353.8	303.9	15.13	0.5623	1.29
ethyl acetate	21	302.8	326.6	301.8	7.86	0.1771	-0.53
	25	301.6	324.5	300.2	7.59	0.1717	-0.55
	27	300.3	323.2	299.7	7.63	0.1739	-0.54
	28	299.7	319.2	299.7	6.51	0.1629	-0.59
	34	302.6	323.3	301.8	6.84	0.1583	-0.62
	43	303.2	326.7	301.7	7.75	0.1607	-0.60
ethanol	11	308.9	312.7	308.8	1.23	0.0632	-1.06
	16	305.5	309.4	305.1	1.28	0.0670	-1.05
	33	304.4	308.8	302.6	1.45	0.0689	-1.04
	35	301.8	305.5	301.9	1.23	0.0593	-1.08
	36	301.9	303.2	301.8	0.43	0.0476	-1.14
	46	300.0	303.8	300.1	1.27	0.0587	-1.09
chloroform	3	300.2	497.4	315.3	65.69	0.4526	0.77
	7	305.9	459.5	313.4	50.21	0.4615	0.81
	9	306.0	486.3	313.2	58.92	0.4590	0.80
	30	301.4	487.9	313.0	61.88	0.4730	0.87
	41	300.6	459.2	308.2	52.76	0.4561	0.79
	47	300.1	452.5	307.3	50.78	0.4467	0.74
benzene	1	296.7	368.6	300.9	24.23	0.5203	1.09
	5	313.2	377.2	306.5	20.43	0.4375	0.70
	12	308.8	375.9	306.5	21.73	0.4618	0.81
	22	301.8	369.7	302.1	22.50	0.4539	0.78
	23	302.1	363.7	301.4	20.39	0.4372	0.70
	42	308.2	374.5	303.2	21.51	0.4152	0.59
acetone	49	303.9	319.0	302.7	4.97	0.0856	-0.96
	50	302.7	315.1	301.9	4.10	0.0797	-0.99
	51	301.9	313.6	301.8	3.88	0.0799	-0.99
$\bar{S}$						0.2891	
σ						0.2123	

		Sensor Element #17					
Solvent	Exposure	initial R	max R	final R	% change	*S*	*d*
toluene	2	678.4	687.9	679.3	1.40	0.0813	0.08
	8	701.3	712.2	701.3	1.55	0.0860	0.15
	19	705.2	715.9	705.9	1.52	0.0857	0.14
	32	712.3	723.1	712.6	1.52	0.0827	0.10
	37	712.6	722.9	713.7	1.45	0.0805	0.06
	44	715.6	725.7	716.2	1.41	0.0811	0.07
methanol	4	700.1	705.6	699.7	0.79	0.0382	-0.59
	6	699.1	704.3	699.3	0.74	0.0376	-0.60
	13	704.9	709.4	704.4	0.64	0.0366	-0.62
	18	705.2	710.8	705.2	0.79	0.0405	-0.56
	26	708.9	714.0	708.1	0.72	0.0344	-0.65
	45	716.2	721.7	715.5	0.77	0.0373	-0.61
isopropanol	10	704.8	707.1	704.0	0.33	0.0871	0.17
	14	704.4	707.3	704.9	0.41	0.1047	0.44
	17	705.3	708.5	705.2	0.45	0.1034	0.42
	20	705.9	709.3	705.4	0.48	0.1024	0.40
	38	713.7	716.8	714.0	0.43	0.1026	0.41
	40	713.9	715.3	713.8	0.20	0.0778	0.02
hexane	15	704.9	709.8	705.2	0.70	0.0628	-0.21
	24	706.5	711.6	706.7	0.72	0.0616	-0.23
	29	709.6	714.6	709.4	0.70	0.0666	-0.15
	31	712.7	717.5	712.3	0.67	0.0571	-0.30
	39	714.0	718.7	713.9	0.66	0.0652	-0.17
	48	717.0	722.6	717.0	0.78	0.0677	-0.13
ethyl acetate	21	705.4	712.2	706.0	0.96	0.0506	-0.40
	25	706.7	712.7	708.9	0.85	0.0450	-0.49
	27	708.1	714.8	708.3	0.95	0.0509	-0.40
	28	708.3	713.6	709.6	0.75	0.0443	-0.50
	34	713.0	719.1	713.0	0.86	0.0466	-0.46
	43	715.9	722.8	715.6	0.96	0.0472	-0.45
ethanol	11	704.0	707.8	703.6	0.54	0.0632	-0.20
	16	705.2	709.1	705.3	0.55	0.0670	-0.15
	33	712.6	716.8	713.0	0.59	0.0657	-0.17
	35	713.0	717.0	713.0	0.56	0.0641	-0.19
	36	713.0	714.9	712.6	0.27	0.0696	-0.11
	46	715.5	720.0	715.9	0.63	0.0696	-0.11
chloroform	3	679.3	734.5	700.1	8.13	0.1267	0.78
	7	699.3	729.9	701.3	4.38	0.0919	0.24
	9	701.3	738.5	704.8	5.30	0.0947	0.28
	30	709.4	745.2	712.7	5.05	0.0908	0.22
	41	713.8	744.8	715.5	4.34	0.0892	0.20
	47	715.9	746.3	717.0	4.25	0.0891	0.20
benzene	1	678.7	687.7	678.4	1.33	0.0651	-0.18
	5	699.7	711.8	699.1	1.73	0.0827	0.10
	12	703.6	714.7	704.9	1.58	0.0764	0.00
	22	706.0	716.9	706.6	1.54	0.0729	-0.05
	23	706.6	716.8	706.5	1.44	0.0724	-0.06
	42	715.5	727.4	715.9	1.66	0.0745	-0.03
acetone	49	717.0	723.4	716.8	0.89	0.0363	-0.62
	50	716.8	722.2	716.5	0.75	0.0347	-0.65
	51	716.5	721.9	716.6	0.75	0.0369	-0.61
$\overline{S}$						0.0764	
σ						0.0643	

Solvent	Exposure	Exposure Norm. Fact.
toluene	2	116.8
	8	126.8
	19	124.9
	32	130.6
	37	128.0
	44	124.6
methanol	4	143.8
	6	138.3
	13	122.9
	18	138.4
	26	148.4
	45	147.6
isopropanol	10	26.4
	14	27.7
	17	30.5
	20	33.2
	38	30.2
	40	18.0
hexane	15	78.0
	24	82.8
	29	75.1
	31	84.0
	39	72.1
	48	82.7
ethyl acetate	21	134.4
	25	133.4
	27	131.7
	28	119.7
	34	130.8
	43	146.2
ethanol	11	60.1
	16	58.2
	33	63.9
	35	62.4
	36	27.3
	46	64.7
chloroform	3	435.7
	7	332.8
	9	392.8
	30	394.3
	41	347.7
	47	341.2
benzene	1	138.2
	5	146.3
	12	145.3
	22	149.6
	23	140.9
	42	159.7
acetone	49	176.4
	50	155.5
	51	146.5
$\overline{S}$		
σ		

Table S2. Coefficients for the transformation of the autoscaled data, *d*, into principal component space for the exposure of the 17 element array to the nine test solvents. The percentage of the total variance contained in each principal component is listed in the last row of the table.

coefficient	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9
1	0.306	-0.192	0.098	-0.058	0.057	0.240	0.270	0.023	0.235
2	0.299	-0.224	-0.051	0.124	-0.079	-0.209	0.034	0.016	-0.237
3	0.282	0.221	-0.153	0.035	-0.337	-0.010	0.104	-0.221	-0.441
4	-0.232	-0.344	-0.092	0.015	-0.131	-0.127	-0.088	0.061	0.019
5	0.237	-0.270	0.185	-0.033	0.538	-0.190	-0.089	-0.058	-0.039
6	0.320	-0.079	0.095	0.281	-0.275	0.086	-0.085	0.078	-0.241
7	0.081	0.151	-0.520	-0.112	0.103	-0.520	0.408	-0.289	0.207
8	-0.179	0.003	-0.466	-0.252	0.362	0.187	-0.311	0.141	-0.424
9	0.266	-0.283	0.103	-0.064	0.202	0.100	0.006	-0.101	0.251
10	0.251	-0.076	-0.375	0.005	-0.037	0.068	0.127	0.754	0.105
11	0.245	0.242	-0.207	0.310	0.060	-0.134	-0.702	-0.103	0.356
12	0.319	0.144	0.112	-0.034	0.192	0.084	-0.037	-0.186	-0.286
13	-0.119	-0.442	0.041	-0.022	0.066	-0.358	-0.079	-0.042	-0.311
14	-0.070	-0.338	-0.373	-0.022	-0.109	0.551	-0.010	-0.452	0.102
15	-0.237	0.148	-0.035	0.727	0.430	0.161	0.320	0.013	-0.121
16	-0.214	0.281	0.274	-0.292	0.005	-0.004	-0.036	0.058	0.023
17	-0.267	-0.262	-0.009	0.327	-0.263	-0.192	-0.097	-0.010	0.080
% variance	4.92E+01	2.56E+01	1.67E+01	3.89E+00	2.11E+00	8.54E-01	5.90E-01	4.47E-01	2.22E-01

coefficient	PC10	PC11	PC12	PC13	PC14	PC15	PC16	PC17
1	-0.559	0.280	-0.273	-0.082	-0.218	0.081	-0.020	0.376
2	0.250	0.222	0.135	-0.733	-0.162	-0.117	0.165	0.027
3	0.066	0.352	-0.282	0.216	0.398	-0.121	-0.188	0.127
4	0.148	-0.134	-0.279	-0.202	0.227	0.613	-0.362	0.240
5	0.147	-0.287	-0.461	0.048	0.168	-0.378	-0.085	0.028
6	-0.231	-0.609	0.138	0.074	0.152	0.098	0.342	0.224
7	-0.091	-0.241	0.116	0.019	-0.004	0.038	0.064	0.167
8	-0.373	0.013	0.136	-0.168	0.133	-0.072	-0.025	0.124
9	0.079	0.211	0.583	0.093	0.544	0.084	-0.076	0.049
10	0.307	0.009	0.001	0.253	-0.096	-0.091	-0.082	0.080
11	0.012	0.183	-0.104	0.041	-0.077	0.102	0.090	0.143
12	0.140	-0.153	0.269	0.120	-0.483	0.222	-0.529	0.102
13	0.002	0.302	0.058	0.484	-0.253	0.173	0.347	0.088
14	0.331	-0.113	-0.074	0.070	-0.167	-0.142	0.149	0.092
15	0.095	0.112	0.004	0.001	0.069	0.104	0.068	0.149
16	0.305	0.011	0.077	-0.043	0.017	-0.134	0.173	0.749
17	-0.215	-0.018	0.221	0.051	-0.079	-0.526	-0.446	0.227
% variance	1.35E-01	9.26E-02	7.24E-02	5.66E-02	3.93E-02	2.34E-02	1.64E-02	1.14E-08

Table S3. The data for the exposure of the 17 element array to the nine test solvents in principal component space. The kth principal component for the ith exposure, PC_{ik}, is given by $PC_{ik} = \sum_j c_{kj} d_{ij}$ where c_{kj} is the jth coefficient of principal component k (see Table S2), and d_{ij} is the autoscaled response for the jth sensor to the ith exposure (see Table S1).

Solvent	Exposure	PC1	PC2	PC3	PC4	PC5	PC6
toluene	2	-2.02E+00	8.65E-01	1.24E+00	-1.36E-01	1.02E-01	7.20E-01
	8	-1.57E+00	1.25E+00	5.10E-01	3.12E-01	1.27E-01	2.81E-02
	19	-1.89E+00	1.25E+00	7.96E-01	-4.35E-02	1.32E-01	2.11E-01
	32	-1.51E+00	1.07E+00	6.11E-01	5.37E-02	8.87E-02	-1.84E-01
	37	-1.51E+00	9.98E-01	7.06E-01	-3.48E-03	-1.20E-01	-6.40E-02
	44	-1.30E+00	9.95E-01	3.41E-01	7.36E-02	-6.93E-02	-5.67E-02
methanol	4	4.57E+00	-3.14E+00	1.89E+00	-2.11E-01	6.89E-01	-4.94E-02
	6	4.61E+00	-3.13E+00	1.97E+00	-1.87E-01	5.34E-01	-1.45E-01
	13	4.67E+00	-3.48E+00	1.89E+00	-3.58E-01	8.25E-01	-2.31E-01
	18	4.40E+00	-3.32E+00	2.01E+00	-3.10E-01	5.65E-01	-5.91E-02
	26	4.53E+00	-3.13E+00	1.98E+00	-2.79E-01	4.10E-01	-4.75E-02
	45	4.41E+00	-3.12E+00	1.73E+00	-3.09E-01	3.46E-01	2.42E-02
isopropanol	10	9.50E-01	6.74E-01	-1.04E+00	1.12E+00	1.24E-01	-9.11E-01
	14	6.84E-01	4.97E-01	-1.11E+00	1.38E+00	-4.26E-01	-6.63E-01
	17	4.69E-01	5.76E-01	-7.34E-01	1.46E+00	-3.90E-01	-4.81E-01
	20	2.89E-01	6.40E-01	-4.28E-01	1.54E+00	-3.54E-01	-3.27E-01
	38	2.82E-01	8.04E-01	-1.10E+00	1.10E+00	-4.58E-01	-6.78E-01
	40	9.46E-01	4.44E-01	-1.22E+00	7.57E-01	-6.35E-02	-1.02E+00
hexane	15	-1.65E+00	1.30E+00	1.92E+00	-1.58E+00	-5.27E-01	-7.17E-02
	24	-1.56E+00	1.33E+00	1.41E+00	-1.46E+00	-5.76E-01	-1.34E-01
	29	-1.75E+00	1.26E+00	2.02E+00	-1.68E+00	-7.04E-01	-1.37E-01
	31	-1.24E+00	1.41E+00	1.27E+00	-1.41E+00	-6.45E-01	-5.12E-01
	39	-1.54E+00	1.33E+00	1.47E+00	-1.49E+00	-6.77E-01	-2.21E-01
	48	-1.32E+00	1.23E+00	1.05E+00	-1.40E+00	-6.22E-01	-4.07E-01
ethyl acetate	21	-4.66E-02	3.47E-01	-2.73E+00	-4.48E-01	6.29E-01	5.15E-01
	25	1.90E-01	3.55E-01	-2.98E+00	-5.34E-01	6.23E-01	3.66E-01
	27	2.26E-01	2.16E-01	-2.51E+00	-2.94E-01	2.76E-01	7.72E-01
	28	5.28E-01	2.23E-01	-2.64E+00	-3.10E-01	3.84E-01	3.74E-01
	34	5.60E-01	4.15E-01	-2.87E+00	-3.49E-01	3.22E-01	-1.90E-01
	43	4.06E-01	4.57E-01	-3.10E+00	-5.56E-01	6.25E-01	-4.36E-01
ethanol	11	2.94E+00	-9.47E-01	-3.30E-01	5.87E-01	-8.94E-01	2.68E-01
	16	2.56E+00	-6.18E-01	-2.37E-01	5.86E-01	-9.62E-01	4.70E-01
	33	2.45E+00	-4.79E-01	-5.71E-01	4.91E-01	-1.07E+00	4.44E-01
	35	2.80E+00	-6.77E-01	-7.43E-01	5.21E-01	-1.11E+00	5.67E-01
	36	3.03E+00	-7.61E-01	-4.41E-01	4.83E-01	-1.37E+00	-3.06E-02
	46	2.71E+00	-4.42E-01	-5.86E-01	6.27E-01	-1.62E+00	5.15E-01
chloroform	3	-2.10E+00	1.19E+00	1.47E+00	1.22E+00	4.09E-01	2.18E-01
	7	-1.69E+00	1.37E+00	1.37E+00	9.79E-01	4.78E-01	1.02E-01
	9	-1.68E+00	1.33E+00	1.31E+00	9.29E-01	4.88E-01	1.30E-01
	30	-1.83E+00	1.30E+00	1.50E+00	8.67E-01	6.10E-01	1.42E-01
	41	-1.78E+00	1.24E+00	1.14E+00	7.52E-01	6.26E-01	1.45E-01
	47	-1.61E+00	1.24E+00	1.11E+00	8.11E-01	5.27E-01	1.50E-01
benzene	1	-1.81E+00	1.05E+00	1.00E+00	-2.47E-01	4.08E-01	5.37E-01
	5	-1.46E+00	1.13E+00	6.03E-01	4.23E-01	2.50E-01	-1.18E-02
	12	-1.68E+00	1.30E+00	5.90E-01	1.07E-01	2.74E-01	9.91E-02
	22	-1.53E+00	1.15E+00	5.05E-01	9.62E-02	2.95E-01	1.02E-01
	23	-1.58E+00	1.08E+00	2.93E-01	9.97E-02	3.63E-01	1.53E-01
	42	-1.24E+00	1.18E+00	2.61E-01	3.40E-01	2.55E-01	-1.39E-01
acetone	49	1.13E+00	4.80E-02	-3.59E+00	-1.02E+00	3.69E-01	-4.21E-01
	50	1.25E+00	-3.55E-02	-3.21E+00	-9.26E-01	2.86E-01	-7.28E-03
	51	1.11E+00	-2.39E-02	-3.21E+00	-9.73E-01	2.96E-01	1.56E-01

Solvent	Exposure	PC7	PC8	PC9	PC10	PC11	PC12
toluene	2	1.60E-01	-2.83E-01	-1.45E-01	1.79E-01	-2.50E-02	1.50E-02
	8	4.78E-02	-3.54E-01	2.53E-01	1.21E-02	8.07E-02	6.89E-02
	19	2.95E-01	-8.55E-03	-1.88E-01	-5.81E-02	-5.44E-02	9.39E-02
	32	3.80E-01	-1.76E-01	-2.45E-02	1.08E-01	1.18E-02	-4.18E-02
	37	5.45E-01	-1.15E-01	6.33E-02	3.20E-01	-4.25E-02	-4.02E-02
	44	4.67E-01	-2.74E-01	-7.96E-03	2.66E-01	7.48E-02	-1.05E-02
methanol	4	-1.37E-01	-1.96E-01	2.51E-03	1.40E-01	-1.70E-01	2.97E-01
	6	-8.67E-02	-3.15E-01	-1.79E-01	5.23E-02	-2.17E-01	3.82E-02
	13	-9.62E-03	1.03E-01	-2.13E-02	1.71E-01	2.56E-02	-1.76E-03
	18	-2.18E-02	-9.38E-02	-4.53E-02	-9.88E-02	2.10E-02	-1.06E-01
	26	1.24E-01	9.22E-03	-1.28E-02	-1.70E-01	5.98E-02	-1.87E-01
	45	2.66E-01	6.03E-01	2.33E-01	-1.01E-01	2.77E-01	-8.91E-02
isopropanol	10	-8.01E-01	-2.25E-01	3.99E-01	1.49E-01	-8.50E-02	-1.24E-01
	14	-4.24E-02	3.78E-01	8.50E-02	6.20E-02	-2.88E-01	1.65E-01
	17	7.33E-02	1.04E-01	8.13E-02	-3.71E-02	-2.12E-01	7.39E-02
	20	1.70E-01	-1.21E-01	8.11E-02	-1.20E-01	-1.44E-01	-1.64E-03
	38	1.95E-01	5.98E-02	-3.54E-01	-2.02E-01	2.72E-01	2.08E-01
	40	-2.70E-01	2.09E-01	-6.05E-01	2.45E-02	1.78E-01	-7.28E-02
hexane	15	-3.61E-01	-3.69E-02	4.89E-02	-8.09E-02	-3.61E-02	4.78E-02
	24	-2.27E-01	5.98E-02	-4.73E-02	-7.36E-02	9.52E-03	4.76E-02
	29	-2.36E-01	2.35E-01	6.26E-02	-1.11E-02	-3.37E-02	1.39E-01
	31	-1.53E-01	-1.44E-02	2.07E-01	4.14E-02	-3.94E-02	-1.37E-01
	39	-1.32E-01	1.72E-01	8.44E-02	-4.06E-03	-5.59E-02	5.56E-02
	48	-2.83E-01	3.61E-02	-1.77E-01	-1.17E-01	1.07E-01	-1.31E-01
ethyl acetate	21	-6.22E-01	-9.00E-02	-2.02E-01	-1.32E-01	-6.26E-02	-3.60E-02
	25	-3.41E-01	4.45E-01	-1.54E-01	1.67E-02	3.09E-02	9.59E-02
	27	-6.79E-01	-8.91E-02	-1.54E-01	1.51E-01	3.47E-02	-6.30E-02
	28	-3.88E-01	7.98E-02	6.41E-02	2.73E-01	9.63E-02	-1.09E-01
	34	-6.95E-02	1.65E-01	2.19E-01	2.21E-01	-3.50E-02	-8.02E-02
	43	1.22E-01	3.86E-01	-6.01E-02	5.81E-02	-1.16E-01	1.25E-02
ethanol	11	-2.03E-01	1.68E-01	3.89E-02	2.08E-01	1.69E-01	3.20E-01
	16	-9.03E-02	-2.36E-01	-1.37E-01	-1.68E-01	-2.91E-01	4.94E-02
	33	2.17E-01	1.86E-01	1.47E-01	-1.98E-01	-2.15E-02	-4.58E-02
	35	1.44E-01	3.84E-01	3.84E-01	1.20E-01	2.75E-01	5.22E-02
	36	-2.25E-01	-9.81E-01	-3.01E-01	8.13E-02	1.95E-01	-1.38E-02
	46	2.35E-01	4.34E-01	-1.36E-01	-3.24E-02	-2.74E-01	-3.07E-01
chloroform	3	-3.33E-01	-7.44E-02	2.43E-01	-2.16E-01	1.24E-01	8.95E-02
	7	-2.81E-01	2.43E-02	2.35E-01	-1.33E-01	3.89E-02	2.36E-02
	9	-2.94E-01	-4.40E-02	2.45E-01	-1.08E-01	-1.66E-02	-4.69E-02
	30	-1.27E-01	-2.86E-02	-2.64E-02	-1.58E-01	-2.81E-02	-1.01E-01
	41	-3.00E-02	2.73E-01	-1.22E-01	-1.62E-01	1.89E-02	-2.38E-03
	47	-1.95E-02	2.70E-01	-1.42E-01	-1.15E-01	-5.00E-02	-3.66E-02
benzene	1	1.92E-01	3.11E-01	-2.94E-01	9.33E-02	-7.72E-03	8.20E-02
	5	8.30E-02	-1.19E-01	1.87E-01	1.47E-01	3.33E-02	-8.85E-02
	12	2.73E-01	-7.62E-02	-2.43E-02	-7.09E-02	-6.71E-02	3.49E-02
	22	3.49E-01	-1.17E-01	-1.07E-04	1.01E-01	-1.93E-02	3.33E-02
	23	3.34E-01	-7.24E-03	-2.64E-01	4.87E-02	6.83E-02	-3.52E-02
	42	5.24E-01	-4.85E-02	-4.13E-02	2.10E-01	1.60E-02	-1.47E-01
acetone	49	6.92E-01	7.54E-02	1.06E-01	-1.63E-01	-9.99E-02	1.21E-01
	50	3.89E-01	-4.06E-01	2.03E-01	-2.16E-01	4.43E-02	-1.47E-02
	51	2.82E-01	-5.75E-01	1.87E-01	-3.24E-01	4.37E-02	1.82E-02

Solvent	Exposure	PC13	PC14	PC15	PC16	PC17
toluene	2	1.08E-01	-1.64E-01	-9.77E-02	6.00E-02	3.63E-07
	8	6.94E-02	-7.15E-02	2.82E-02	5.86E-02	9.33E-08
	19	2.43E-02	-5.36E-02	-7.70E-02	-6.30E-02	1.49E-07
	32	-1.47E-02	-1.24E-02	3.37E-03	-4.56E-02	-1.98E-08
	37	-3.90E-03	-6.08E-02	3.62E-02	-4.89E-02	-7.42E-11
	44	-1.51E-01	-1.98E-02	-6.04E-02	-3.09E-02	-1.58E-07
methanol	4	1.01E-01	8.00E-02	6.23E-02	-9.42E-02	1.57E-07
	6	-1.07E-01	-1.55E-01	3.02E-02	-1.83E-02	-1.00E-07
	13	1.47E-01	1.63E-01	-1.25E-01	-4.10E-03	3.70E-07
	18	1.57E-01	-7.90E-02	4.54E-04	1.38E-02	2.71E-07
	26	-2.55E-01	-1.14E-01	-4.82E-03	7.95E-02	-4.02E-07
	45	2.35E-02	4.85E-02	3.31E-03	3.47E-02	-2.93E-08
isopropanol	10	-1.73E-01	-8.69E-02	-7.85E-02	3.32E-02	-1.71E-07
	14	1.75E-02	1.14E-01	-1.13E-01	7.40E-02	1.35E-07
	17	3.57E-02	8.08E-02	-3.86E-02	5.66E-02	5.77E-08
	20	4.99E-02	5.03E-02	2.37E-02	4.04E-02	-8.07E-09
	38	2.06E-01	-2.05E-01	-2.36E-02	1.67E-03	3.65E-07
	40	-3.69E-02	-6.93E-02	1.50E-01	-9.94E-02	-2.17E-07
hexane	15	5.93E-02	3.72E-02	-4.46E-02	4.81E-02	1.67E-07
	24	1.55E-02	8.43E-03	3.57E-02	1.91E-02	1.07E-08
	29	-1.39E-01	-8.24E-02	-4.41E-02	3.28E-02	-1.03E-07
	31	1.45E-01	4.61E-02	1.17E-01	-1.95E-02	1.08E-07
	39	-9.42E-02	3.64E-02	1.36E-02	-6.01E-02	-1.45E-07
	48	7.04E-02	3.52E-02	-6.95E-02	-3.06E-02	1.71E-07
ethyl acetate	21	-6.03E-03	8.22E-03	-3.65E-02	4.65E-02	5.32E-08
	25	-5.82E-02	3.78E-02	-4.98E-03	-1.61E-02	-5.65E-08
	27	3.38E-02	-1.16E-02	1.24E-02	-2.51E-02	7.38E-08
	28	8.90E-02	-5.94E-02	2.10E-02	1.10E-02	1.69E-07
	34	2.89E-02	-3.97E-02	5.18E-02	7.05E-03	3.78E-08
	43	1.21E-01	2.69E-02	-6.06E-02	-1.69E-03	3.07E-07
ethanol	11	-9.49E-02	-4.50E-02	1.39E-01	3.83E-02	-2.79E-07
	16	1.17E-01	-2.20E-02	7.66E-02	-6.03E-04	9.20E-08
	33	4.34E-02	-6.21E-02	5.94E-02	-1.07E-02	-5.40E-08
	35	9.84E-04	6.64E-02	-3.80E-02	-2.16E-02	-4.66E-08
	36	-7.81E-02	1.93E-01	-6.90E-02	5.31E-02	-1.47E-07
	46	3.74E-04	-4.84E-02	-5.73E-02	-5.41E-02	7.11E-09
chloroform	3	1.65E-02	-1.32E-01	-1.49E-01	-2.00E-01	1.57E-07
	7	3.07E-02	-1.33E-02	1.19E-01	7.50E-02	-1.09E-07
	9	1.26E-02	2.97E-02	2.09E-02	7.71E-03	-4.63E-08
	30	-1.20E-01	1.09E-01	2.85E-02	-3.92E-03	-2.93E-07
	41	-5.63E-02	9.26E-02	3.10E-02	-9.90E-03	-1.78E-07
	47	-9.27E-02	1.41E-01	-1.82E-02	-1.42E-02	-1.92E-07
benzene	1	-1.26E-01	-1.85E-02	-8.60E-03	8.44E-02	-1.43E-07
	5	1.78E-01	-5.74E-02	3.20E-02	3.99E-02	2.65E-07
	12	2.25E-02	4.64E-02	7.18E-02	3.61E-03	-5.31E-08
	22	6.15E-04	2.15E-02	4.77E-02	3.82E-02	-3.70E-08
	23	2.31E-02	4.60E-02	9.38E-03	5.72E-02	2.08E-08
	42	-2.82E-02	1.16E-01	1.95E-03	-5.15E-02	-8.40E-08
acetone	49	-9.28E-02	-8.58E-02	-2.62E-02	2.79E-02	-6.45E-08
	50	-1.28E-01	2.07E-02	1.19E-02	-3.33E-02	-2.43E-07
	51	3.29E-02	9.49E-02	1.27E-02	-4.39E-02	-1.49E-08

Table S4. The data for the exposure of the 17 element array to varying concentrations of methanol and ethanol, and to mixtures of methanol and ethanol. (Note: sensor #1 malfunctioned resulting in only 16 viable sensors).

Description of column headings and symbols

exposure	This column indicates the order in which the exposures were performed with 1 being the first exposure and 22 the last.
Q MeOH	Flow rate of methanol saturated air stream (L min^{-1})
Q EtOH	Flow rate of ethanol saturated air stream (L min^{-1})
initial R	The initial baseline resistance before exposure (Ω)
max R	The maximum resistance during the exposure to solvent vapor (Ω)
final R	The final baseline after a minimum of a 5 min recovery period (Ω)
% change	100*(max R - initial R) / initial R
d'	Autoscaled data: $d' = (\Delta R_{ij} - \overline{\Delta}_j) / \sigma_j$ where ΔR_{ij} is (max R - initial R) for the jth sensor to the iith exposure; $\overline{\Delta}_j$ and σ_j (listed as $\overline{\Delta}$ and σ) at the bottom of the table) are the mean and standard deviation, respectively, of all of the (max R - inital R) for sensor j to the entire range of solvents.

			Sensor Element #2					Sensor Element #3				
Exposure #	Q MeOH	Q EtOH	Initial R	max R	final R	% change	*d*	Initial R	max R	final R	% change	*d*
1	0.60	0.00	224.1	226.1	224.2	0.892	2.012	376.5	380.8	376.5	1.142	2.028
2	0.50	0.00	224.2	226.0	224.0	0.803	1.616	376.5	380.4	376.3	1.023	1.491
3	0.42	0.08	224.0	225.8	224.0	0.804	1.613	376.3	379.9	376.3	0.957	1.190
4	0.34	0.16	224.0	225.4	224.1	0.625	0.816	376.3	379.6	376.3	0.877	0.830
5	0.25	0.25	224.1	225.3	224.0	0.535	0.417	376.3	379.4	376.0	0.824	0.591
6	0.16	0.34	224.0	225.1	224.0	0.491	0.217	376.0	379.3	376.1	0.878	0.830
7	0.08	0.42	224.0	224.9	224.1	0.402	-0.181	376.1	378.9	376.2	0.744	0.231
8	0.00	0.50	224.1	224.6	224.1	0.223	-0.979	376.2	378.6	376.2	0.638	-0.248
9	0.00	0.60	224.1	224.7	224.1	0.268	-0.780	376.2	378.9	376.1	0.718	0.112
10	0.00	0.40	224.1	224.6	224.0	0.223	-0.979	376.1	378.3	376.1	0.585	-0.487
11	0.40	0.00	224.0	225.6	223.8	0.714	1.215	376.1	379.5	375.7	0.904	0.950
12	0.00	0.30	223.8	224.3	223.9	0.223	-0.979	375.7	377.4	375.9	0.452	-1.086
13	0.25	0.05	223.9	224.5	223.9	0.268	-0.780	375.9	377.7	375.7	0.479	-0.967
14	0.20	0.10	223.9	224.6	223.9	0.313	-0.580	375.7	377.8	375.7	0.559	-0.607
15	0.15	0.15	223.9	224.7	223.9	0.357	-0.381	375.7	378.0	375.6	0.612	-0.368
16	0.10	0.20	223.9	224.9	223.8	0.447	0.018	375.6	378.2	375.6	0.692	-0.008
17	0.05	0.25	223.8	225.0	223.8	0.536	0.417	375.6	378.4	375.6	0.745	0.231
18	0.30	0.00	223.8	225.1	223.8	0.581	0.616	375.6	378.4	375.7	0.745	0.231
19	0.20	0.00	223.8	224.8	223.7	0.447	0.018	375.7	378.0	375.5	0.612	-0.368
20	0.10	0.00	223.7	224.4	223.7	0.313	-0.580	375.5	377.1	375.5	0.426	-1.206
21	0.00	0.20	223.7	224.1	223.8	0.179	-1.179	375.5	377.0	375.6	0.399	-1.326
22	0.00	0.10	223.8	224.0	223.8	0.089	-1.577	375.6	376.5	375.7	0.240	-2.045
$\bar{\Delta}$						0.442					0.693	
σ						0.224					0.222	

			Sensor Element #4					Sensor Element #5				
Exposure #	Q MeOH	Q EtOH	initial R	max R	final R	% change	*d*	initial R	max R	final R	% change	*d*
1	0.60	0.00	723.2	725.6	723.5	0.332	1.732	353.6	356.0	353.7	0.679	2.016
2	0.50	0.00	723.5	725.9	723.6	0.332	1.734	353.7	355.8	353.5	0.594	1.601
3	0.42	0.08	723.6	725.0	722.9	0.193	0.226	353.5	355.5	353.6	0.566	1.461
4	0.34	0.16	722.9	724.7	723.7	0.249	0.828	353.6	355.0	353.4	0.396	0.630
5	0.25	0.25	723.7	724.9	722.4	0.166	-0.075	353.4	354.9	353.5	0.424	0.768
6	0.16	0.34	722.4	724.1	722.9	0.235	0.678	353.5	354.5	353.6	0.283	0.076
7	0.08	0.42	722.9	723.9	722.8	0.138	-0.377	353.6	354.2	353.6	0.170	-0.479
8	0.00	0.50	722.8	723.9	722.3	0.152	-0.226	353.6	353.7	353.5	0.028	-1.172
9	0.00	0.60	722.3	723.9	722.3	0.222	0.527	353.5	353.7	353.6	0.057	-1.033
10	0.00	0.40	722.3	723.2	722.9	0.125	-0.527	353.6	353.8	353.6	0.057	-1.033
11	0.40	0.00	722.9	725.3	723.0	0.332	1.732	353.6	355.4	353.3	0.509	1.184
12	0.00	0.30	723.0	723.6	723.1	0.083	-0.979	353.3	353.4	353.4	0.028	-1.172
13	0.25	0.05	723.1	723.7	723.7	0.083	-0.979	353.4	353.9	353.4	0.141	-0.617
14	0.20	0.10	723.7	723.7	722.3	0.000	-1.883	353.4	354.0	353.5	0.170	-0.479
15	0.15	0.15	722.3	723.8	722.6	0.208	0.376	353.5	354.2	353.4	0.198	-0.340
16	0.10	0.20	722.6	723.8	722.5	0.166	-0.075	353.4	354.4	353.2	0.283	0.076
17	0.05	0.25	722.5	723.8	721.6	0.180	0.075	353.2	354.6	353.3	0.396	0.630
18	0.30	0.00	721.6	722.8	721.1	0.166	-0.075	353.3	354.7	353.3	0.396	0.630
19	0.20	0.00	721.1	722.8	721.9	0.236	0.678	353.3	354.3	353.3	0.283	0.076
20	0.10	0.00	721.9	722.3	721.3	0.055	-1.280	353.3	354.0	353.2	0.198	-0.340
21	0.00	0.20	721.3	722.0	721.4	0.097	-0.828	353.2	353.3	353.3	0.028	-1.172
22	0.00	0.10	721.4	721.8	721.4	0.055	-1.280	353.3	353.3	353.2	0.000	-1.310
$\bar{\Delta}$						0.173					0.267	
σ						0.092					0.204	

			Sensor Element #6					Sensor Element #7				
Exposure #	Q MeOH	Q EtOH	initial R	max R	final R	% change	*d*	initial R	max R	final R	% change	*d*
1	0.60	0.00	169.3	176.4	169.5	4.194	2.187	673.6	678.0	673.5	0.653	1.996
2	0.50	0.00	169.5	175.8	168.9	3.695	1.664	673.5	677.4	673.3	0.579	1.424
3	0.42	0.08	168.9	174.8	169.1	3.493	1.436	673.3	677.0	673.4	0.550	1.193
4	0.34	0.16	169.1	174.1	169.2	2.957	0.874	673.4	676.7	673.2	0.490	0.735
5	0.25	0.25	169.2	173.8	168.9	2.719	0.623	673.2	676.5	673.1	0.490	0.735
6	0.16	0.34	168.9	173.2	169.0	2.546	0.436	673.1	676.5	672.9	0.505	0.849
7	0.08	0.42	169.0	172.5	169.1	2.071	-0.064	672.9	675.9	673.1	0.446	0.391
8	0.00	0.50	169.1	171.9	169.1	1.656	-0.502	673.1	675.9	673.1	0.416	0.162
9	0.00	0.60	169.1	172.2	169.1	1.833	-0.314	673.1	676.0	673.1	0.431	0.276
10	0.00	0.40	169.1	171.6	168.9	1.478	-0.690	673.1	675.4	673.0	0.342	-0.412
11	0.40	0.00	168.9	174.3	168.6	3.197	1.124	673.0	676.4	672.4	0.505	0.849
12	0.00	0.30	168.6	170.7	168.8	1.246	-0.940	672.4	674.4	672.8	0.297	-0.756
13	0.25	0.05	168.8	171.1	168.8	1.363	-0.815	672.8	674.8	672.7	0.297	-0.756
14	0.20	0.10	168.8	171.4	168.7	1.540	-0.627	672.7	674.6	672.6	0.282	-0.870
15	0.15	0.15	168.7	171.6	168.7	1.719	-0.439	672.6	674.7	672.5	0.312	-0.641
16	0.10	0.20	168.7	172.0	168.6	1.956	-0.189	672.5	675.0	672.6	0.372	-0.182
17	0.05	0.25	168.6	172.5	168.7	2.313	0.186	672.6	675.3	672.5	0.401	0.047
18	0.30	0.00	168.7	172.8	168.8	2.430	0.311	672.5	675.4	672.5	0.431	0.276
19	0.20	0.00	168.8	172.0	168.6	1.896	-0.252	672.5	674.6	672.2	0.312	-0.641
20	0.10	0.00	168.6	170.6	168.6	1.186	-1.002	672.2	673.8	672.2	0.238	-1.214
21	0.00	0.20	168.6	170.1	168.6	0.890	-1.315	672.2	673.7	672.3	0.223	-1.329
22	0.00	0.10	168.6	169.5	168.6	0.534	-1.690	672.3	673.1	672.3	0.119	-2.132
$\bar{\Delta}$						2.132					0.395	
σ						0.944					0.129	

			Sensor Element #8					Sensor Element #9				
Exposure #	Q MeOH	Q EtOH	Initial R	max R	final R	% change	*d*	Initial R	max R	final R	% change	*d*
1	0.60	0.00	407.9	409.9	408.0	0.490	1.979	321.2	325.7	321.6	1.401	2.049
2	0.50	0.00	408.0	409.8	407.8	0.429	1.295	321.6	325.7	320.9	1.278	1.741
3	0.42	0.08	407.8	409.5	407.8	0.417	1.155	320.9	324.4	321.1	1.091	1.262
4	0.34	0.16	407.8	409.5	407.8	0.417	1.155	321.1	323.8	321.0	0.841	0.633
5	0.25	0.25	407.8	409.3	407.6	0.368	0.605	321.0	323.3	320.8	0.717	0.318
6	0.16	0.34	407.6	409.2	407.6	0.393	0.880	320.8	322.7	320.9	0.592	0.003
7	0.08	0.42	407.6	409.0	407.6	0.343	0.331	320.9	322.1	320.8	0.374	-0.548
8	0.00	0.50	407.6	408.9	407.7	0.319	0.056	320.8	321.5	320.7	0.218	-0.941
9	0.00	0.60	407.7	409.0	407.7	0.319	0.056	320.7	321.5	320.7	0.249	-0.862
10	0.00	0.40	407.7	408.8	407.6	0.270	-0.493	320.7	321.5	320.6	0.249	-0.862
11	0.40	0.00	407.6	409.1	407.3	0.368	0.605	320.6	324.3	320.5	1.154	1.420
12	0.00	0.30	407.3	408.2	407.3	0.221	-1.042	320.5	320.9	320.4	0.125	-1.177
13	0.25	0.05	407.3	408.2	407.1	0.221	-1.042	320.4	321.4	320.4	0.312	-0.705
14	0.20	0.10	407.1	408.2	407.2	0.270	-0.493	320.4	321.8	320.5	0.437	-0.390
15	0.15	0.15	407.2	408.3	407.1	0.270	-0.493	320.5	322.2	320.6	0.530	-0.154
16	0.10	0.20	407.1	408.3	406.9	0.295	-0.219	320.6	322.6	320.6	0.624	0.082
17	0.05	0.25	406.9	408.3	407.0	0.344	0.331	320.6	323.0	320.6	0.749	0.397
18	0.30	0.00	407.0	408.4	407.1	0.344	0.331	320.6	323.5	320.6	0.905	0.790
19	0.20	0.00	407.1	408.2	407.0	0.270	-0.493	320.6	322.8	320.5	0.686	0.239
20	0.10	0.00	407.0	407.7	406.9	0.172	-1.592	320.5	321.7	320.4	0.374	-0.548
21	0.00	0.20	406.9	407.9	407.1	0.246	-0.768	320.4	320.5	320.3	0.031	-1.413
22	0.00	0.10	407.1	407.6	407.0	0.123	-2.141	320.3	320.5	320.2	0.062	-1.335
$\bar{\Delta}$						0.314					0.591	
σ						0.089					0.396	

			Sensor Element #10					Sensor Element #11				
Exposure #	Q MeOH	Q EtOH	initial R	max R	final R	% change	*d*	initial R	max R	final R	% change	*d*
1	0.60	0.00	264.0	266.4	264.2	0.909	2.063	366.4	369.2	366.5	0.764	2.221
2	0.50	0.00	264.2	266.4	263.9	0.815	1.563	366.5	369.0	366.3	0.669	1.652
3	0.42	0.08	263.9	266.0	264.0	0.796	1.456	366.3	368.6	366.3	0.628	1.405
4	0.34	0.16	264.0	265.8	263.9	0.682	0.850	366.3	368.2	366.3	0.519	0.752
5	0.25	0.25	263.9	265.6	263.8	0.644	0.648	366.3	368.1	366.3	0.491	0.589
6	0.16	0.34	263.8	265.4	263.6	0.607	0.445	366.3	367.9	366.3	0.437	0.263
7	0.08	0.42	263.6	265.1	263.8	0.569	0.243	366.3	367.7	366.3	0.382	-0.063
8	0.00	0.50	263.8	265.1	263.8	0.493	-0.161	366.3	367.5	366.3	0.328	-0.389
9	0.00	0.60	263.8	265.2	263.8	0.531	0.041	366.3	367.6	366.2	0.355	-0.226
10	0.00	0.40	263.8	264.9	263.7	0.417	-0.565	366.2	367.3	366.2	0.300	-0.552
11	0.40	0.00	263.7	265.6	263.6	0.721	1.052	366.2	368.3	366.1	0.573	1.079
12	0.00	0.30	263.6	264.5	263.6	0.341	-0.970	366.1	366.9	366.1	0.219	-1.042
13	0.25	0.05	263.6	264.6	263.6	0.379	-0.768	366.1	367.0	366.0	0.246	-0.879
14	0.20	0.10	263.6	264.6	263.4	0.379	-0.768	366.0	367.0	366.0	0.273	-0.716
15	0.15	0.15	263.4	264.5	263.4	0.418	-0.565	366.0	367.2	365.9	0.328	-0.389
16	0.10	0.20	263.4	264.7	263.3	0.494	-0.161	365.9	367.4	365.9	0.410	0.100
17	0.05	0.25	263.3	264.8	263.4	0.570	0.243	365.9	367.5	365.9	0.437	0.263
18	0.30	0.00	263.4	264.9	263.4	0.569	0.243	365.9	367.6	365.9	0.465	0.426
19	0.20	0.00	263.4	264.5	263.4	0.418	-0.565	365.9	367.1	365.9	0.328	-0.389
20	0.10	0.00	263.4	264.1	263.2	0.266	-1.374	365.9	366.6	365.8	0.191	-1.205
21	0.00	0.20	263.2	264.0	263.3	0.304	-1.172	365.8	366.5	365.8	0.191	-1.205
22	0.00	0.10	263.3	263.8	263.4	0.190	-1.778	365.8	366.2	365.8	0.109	-1.694
$\bar{\Delta}$						0.523					0.393	
σ						0.187					0.167	

			Sensor Element #12					Sensor Element #13				
Exposure #	Q MeOH	Q EtOH	initial R	max R	final R	% change	*d*	initial R	max R	final R	% change	*d*
1	0.60	0.00	272.7	273.8	273.3	0.403	3.123	673.8	675.9	673.4	0.312	1.355
2	0.50	0.00	273.3	274.1	273.2	0.293	1.873	673.4	675.8	673.1	0.349	1.688
3	0.42	0.08	273.2	273.7	273.1	0.183	0.609	673.1	675.4	673.6	0.342	1.621
4	0.34	0.16	273.1	273.4	273.1	0.110	-0.229	673.6	674.5	673.1	0.134	-0.238
5	0.25	0.25	273.1	273.5	273.2	0.146	0.190	673.1	674.4	673.5	0.193	0.293
6	0.16	0.34	273.2	273.4	273.0	0.073	-0.648	673.5	674.1	672.9	0.089	-0.637
7	0.08	0.42	273.0	273.3	273.2	0.110	-0.229	672.9	673.9	672.8	0.149	-0.106
8	0.00	0.50	273.2	273.3	273.1	0.037	-1.067	672.8	673.0	672.4	0.030	-1.168
9	0.00	0.60	273.1	273.4	273.1	0.110	-0.229	672.4	673.1	673.1	0.104	-0.504
10	0.00	0.40	273.1	273.2	272.9	0.037	-1.067	673.1	673.4	672.8	0.045	-1.035
11	0.40	0.00	272.9	273.4	272.7	0.183	0.609	672.8	675.4	673.0	0.386	2.019
12	0.00	0.30	272.7	273.0	272.8	0.110	-0.229	673.0	673.1	672.3	0.015	-1.301
13	0.25	0.05	272.8	272.9	272.7	0.037	-1.067	672.3	673.4	672.8	0.164	0.027
14	0.20	0.10	272.7	273.0	272.6	0.110	-0.229	672.8	673.3	672.4	0.074	-0.770
15	0.15	0.15	272.6	273.0	272.8	0.147	0.190	672.4	673.1	672.8	0.104	-0.504
16	0.10	0.20	272.8	273.0	272.6	0.073	-0.648	672.8	673.5	672.4	0.104	-0.504
17	0.05	0.25	272.6	273.1	272.5	0.183	0.609	672.4	674.2	672.8	0.268	0.957
18	0.30	0.00	272.5	273.0	272.4	0.183	0.609	672.8	674.4	672.6	0.238	0.691
19	0.20	0.00	272.4	272.7	272.4	0.110	-0.229	672.6	673.7	672.5	0.164	0.027
20	0.10	0.00	272.4	272.7	272.1	0.110	-0.229	672.5	673.7	672.6	0.178	0.160
21	0.00	0.20	272.1	272.3	272.4	0.074	-0.648	672.6	672.9	672.4	0.045	-1.035
22	0.00	0.10	272.4	272.5	272.2	0.037	-1.067	672.4	672.7	672.5	0.045	-1.035
$\bar{\Delta}$						0.130					0.160	
σ						0.087					0.112	

			Sensor Element #14					Sensor Element #15				
Exposure #	Q MeOH	Q EtOH	initial R	max R	final R	% change	*d*	initial R	max R	final R	% change	*d*
1	0.60	0.00	487.9	491.5	487.8	0.738	1.739	527.2	531.8	527.2	0.873	1.843
2	0.50	0.00	487.8	491.3	487.5	0.708	1.584	527.2	531.4	527.1	0.798	1.414
3	0.42	0.08	487.5	490.5	487.4	0.615	1.104	527.1	531.2	527.1	0.778	1.294
4	0.34	0.16	487.4	490.2	487.0	0.574	0.892	527.1	530.6	526.9	0.664	0.634
5	0.25	0.25	487.0	489.6	487.0	0.534	0.680	526.9	530.4	526.3	0.664	0.634
6	0.16	0.34	487.0	489.3	486.7	0.472	0.363	526.3	529.6	525.9	0.627	0.414
7	0.08	0.42	486.7	488.5	487.0	0.370	-0.166	525.9	529.2	525.4	0.627	0.414
8	0.00	0.50	487.0	488.0	487.2	0.205	-1.013	525.4	528.5	525.1	0.590	0.194
9	0.00	0.60	487.2	488.2	486.7	0.205	-1.013	525.1	528.8	524.8	0.705	0.854
10	0.00	0.40	486.7	487.6	486.4	0.185	-1.119	524.8	527.6	524.6	0.534	-0.135
11	0.40	0.00	486.4	489.7	485.9	0.678	1.421	524.6	528.4	524.1	0.724	0.964
12	0.00	0.30	485.9	486.8	486.5	0.185	-1.119	524.1	526.3	524.2	0.420	-0.795
13	0.25	0.05	486.5	487.7	486.5	0.247	-0.801	524.2	526.6	524.0	0.458	-0.575
14	0.20	0.10	486.5	488.0	486.1	0.308	-0.484	524.0	526.5	524.6	0.477	-0.465
15	0.15	0.15	486.1	488.1	486.6	0.411	0.045	524.6	526.9	524.5	0.438	-0.685
16	0.10	0.20	486.6	489.0	486.8	0.493	0.469	524.5	527.1	524.5	0.496	-0.355
17	0.05	0.25	486.8	488.9	486.6	0.431	0.151	524.5	527.4	524.5	0.553	-0.025
18	0.30	0.00	486.6	489.1	486.7	0.514	0.575	524.5	527.4	524.8	0.553	-0.025
19	0.20	0.00	486.7	488.9	486.8	0.452	0.257	524.8	527.3	525.2	0.476	-0.465
20	0.10	0.00	486.8	488.0	486.5	0.247	-0.801	525.2	526.6	525.4	0.267	-1.674
21	0.00	0.20	486.5	487.5	486.7	0.206	-1.013	525.4	527.1	525.3	0.324	-1.344
22	0.00	0.10	486.7	487.0	486.6	0.062	-1.753	525.3	526.3	525.2	0.190	-2.114
$\bar{\Delta}$						0.402					0.556	
σ						0.194					0.172	

			Sensor Element #16					Sensor Element #17				
Exposure #	Q MeOH	Q EtOH	initial R	max R	final R	% change	*d*	initial R	max R	final R	% change	*d*
1	0.60	0.00	414.7	416.3	414.8	0.386	0.964	940.7	946.5	940.2	0.617	2.064
2	0.50	0.00	414.8	416.3	414.9	0.361	0.696	940.2	945.5	939.8	0.561	1.615
3	0.42	0.08	414.9	416.3	415.3	0.337	0.434	939.8	944.8	939.4	0.532	1.374
4	0.34	0.16	415.3	416.6	415.3	0.313	0.169	939.4	943.5	938.1	0.436	0.597
5	0.25	0.25	415.3	416.8	415.4	0.361	0.699	938.1	942.2	934.8	0.437	0.597
6	0.16	0.34	415.4	417.0	415.5	0.385	0.964	934.8	938.8	933.1	0.428	0.511
7	0.08	0.42	415.5	417.1	415.4	0.385	0.964	933.1	936.7	931.9	0.386	0.166
8	0.00	0.50	415.4	417.2	415.4	0.433	1.494	931.9	935.4	930.9	0.376	0.079
9	0.00	0.60	415.4	417.4	415.5	0.481	2.024	930.9	934.7	929.7	0.408	0.338
10	0.00	0.40	415.5	416.8	415.5	0.313	0.169	929.7	932.5	928.1	0.301	-0.525
11	0.40	0.00	415.5	416.9	415.8	0.337	0.434	928.1	932.8	927.4	0.506	1.115
12	0.00	0.30	415.8	416.9	415.8	0.265	-0.361	927.4	929.9	928.6	0.270	-0.784
13	0.25	0.05	415.8	416.9	415.8	0.265	-0.361	928.6	931.3	930.5	0.291	-0.611
14	0.20	0.10	415.8	416.9	416.0	0.265	-0.361	930.5	933.1	932.2	0.279	-0.697
15	0.15	0.15	416.0	417.0	416.1	0.240	-0.626	932.2	935.1	933.1	0.311	-0.439
16	0.10	0.20	416.1	417.1	416.2	0.240	-0.626	933.1	936.2	933.9	0.332	-0.266
17	0.05	0.25	416.2	417.2	416.1	0.240	-0.626	933.9	937.4	934.6	0.375	0.079
18	0.30	0.00	416.1	417.2	416.3	0.264	-0.361	934.6	938.1	934.8	0.374	0.079
19	0.20	0.00	416.3	417.1	416.4	0.192	-1.156	934.8	937.5	934.8	0.289	-0.611
20	0.10	0.00	416.4	417.0	416.5	0.144	-1.686	934.8	936.6	935.4	0.193	-1.388
21	0.00	0.20	416.5	417.4	416.5	0.216	-0.891	935.4	937.2	935.8	0.192	-1.388
22	0.00	0.10	416.5	417.0	416.6	0.120	-1.951	935.8	937.0	935.9	0.128	-1.906
$\bar{\Delta}$						0.298					0.365	
σ						0.091					0.123	

Table S5. Coefficients for the transformation of the autoscaled data, *d'*, into principal component space for the exposure of the 17 element array to varying concentrations of methanol and ethanol, and to mixtures of methanol and ethanol. The percentage of the total variance contained in each principal component is listed in the last row of the table. There is no coefficient for sensor 1 since it malfunctioned.

coefficient	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8
2	0.263	0.194	0.005	-0.168	-0.040	-0.085	0.036	-0.093
3	0.268	-0.110	-0.052	-0.102	-0.112	-0.012	-0.119	-0.086
4	0.231	-0.036	-0.771	0.552	0.118	-0.121	0.030	-0.032
5	0.252	0.287	0.045	-0.191	-0.024	0.004	0.023	-0.204
6	0.272	0.023	0.015	-0.083	-0.066	-0.004	0.238	-0.154
7	0.262	-0.203	0.050	-0.088	-0.031	-0.097	-0.051	-0.615
8	0.258	-0.181	-0.024	-0.176	-0.297	-0.557	-0.341	0.399
9	0.255	0.258	-0.061	-0.061	-0.002	0.384	0.251	0.174
10	0.269	-0.097	0.048	-0.086	0.003	-0.269	0.168	0.018
11	0.271	0.004	0.011	-0.056	-0.084	-0.056	0.288	0.065
12	0.222	0.241	0.480	0.695	-0.390	0.038	-0.134	0.013
13	0.221	0.336	0.216	0.067	0.788	-0.227	-0.265	0.070
14	0.255	0.200	-0.249	-0.233	-0.149	0.487	-0.553	0.109
15	0.252	-0.275	0.115	0.000	0.141	0.177	0.285	0.553
16	0.156	-0.634	0.182	0.132	0.217	0.305	-0.312	-0.089
17	0.266	-0.162	0.078	0.024	0.095	0.144	0.244	-0.123
% variance	8.40E+01	9.92E+00	1.97E+00	1.78E+00	1.45E+00	2.48E-01	2.19E-01	1.41E-01

coefficient	PC9	PC10	PC11	PC12	PC13	PC14	PC15	PC16
2	-0.010	0.472	0.367	0.166	0.057	0.400	0.534	-0.112
3	0.440	0.137	-0.160	-0.488	0.612	0.057	-0.109	-0.043
4	0.014	0.027	-0.073	0.051	-0.049	0.023	0.056	-0.020
5	0.106	-0.158	-0.758	0.223	-0.135	-0.028	0.271	-0.143
6	-0.035	0.196	-0.064	0.431	0.112	0.208	-0.542	0.504
7	0.106	0.133	0.175	-0.261	-0.533	-0.251	-0.119	-0.022
8	0.174	-0.147	0.096	0.240	-0.089	-0.220	0.060	0.132
9	0.525	-0.347	0.361	0.133	-0.132	-0.052	-0.126	-0.201
10	-0.408	-0.169	0.032	0.007	0.103	0.184	-0.347	-0.668
11	-0.258	-0.476	0.040	-0.449	-0.087	0.285	0.238	0.430
12	-0.038	0.049	-0.004	-0.033	-0.009	-0.007	-0.027	-0.031
13	0.017	-0.029	0.065	-0.088	0.028	-0.043	-0.098	0.120
14	-0.406	0.053	0.029	-0.089	-0.044	-0.068	-0.131	0.030
15	0.002	0.466	-0.247	-0.182	-0.298	-0.086	-0.006	-0.034
16	0.091	-0.233	-0.026	0.259	0.005	0.358	0.136	-0.018
17	-0.262	-0.051	0.131	0.186	0.411	-0.649	0.275	0.057
% variance	9.02E-02	6.32E-02	4.78E-02	4.36E-02	2.49E-02	1.70E-02	8.06E-03	2.37E-03

Table S6. The data in principal component space for the exposure of the 17 element array to varying concentrations of methanol and ethanol, and to mixtures of methanol and ethanol. The *k*th principal component for the *i*th exposure, PC_{ik}, is given by $PC_{ik} = \sum_j c_{kj} d'_{ij}$ (j = 2-17) where c_{kj} is the *jth* coefficient of principal component *k* (see Table S5), and d'_{ij} is the autoscaled response for the *j*th sensor to the *i*th exposure (see Table S6).

Exposure #	Q MeOH	Q EtOH	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
1	0.60	0.00	3.826	0.147	0.064	-0.715	-0.403	0.432	1.180	-0.394	0.313	0.648
2	0.50	0.00	3.435	0.135	0.004	-0.664	-0.267	0.412	1.015	-0.324	0.279	0.575
3	0.42	0.08	3.182	0.074	0.078	-0.751	-0.214	0.313	0.976	-0.316	0.214	0.600
4	0.34	0.16	2.668	-0.090	-0.066	-0.629	-0.300	0.254	0.778	-0.262	0.157	0.535
5	0.25	0.25	2.510	-0.126	0.054	-0.574	-0.219	0.248	0.681	-0.264	0.114	0.489
6	0.16	0.34	2.337	-0.292	-0.049	-0.525	-0.249	0.183	0.619	-0.273	0.131	0.513
7	0.08	0.42	1.973	-0.351	0.082	-0.403	-0.143	0.100	0.482	-0.180	0.028	0.479
8	0.00	0.50	1.574	-0.557	0.052	-0.282	-0.115	0.048	0.432	-0.136	0.013	0.377
9	0.00	0.60	1.786	-0.570	0.075	-0.224	-0.072	0.058	0.487	-0.122	0.035	0.455
10	0.00	0.40	1.405	-0.402	0.040	-0.273	-0.108	0.050	0.415	-0.093	0.053	0.346
11	0.40	0.00	3.044	0.123	-0.056	-0.613	-0.131	0.392	0.850	-0.253	0.244	0.502
12	0.00	0.30	1.157	-0.331	0.081	-0.185	-0.141	0.037	0.297	-0.115	-0.027	0.346
13	0.25	0.05	1.349	-0.215	0.065	-0.297	-0.015	0.096	0.340	-0.093	0.043	0.304
14	0.20	0.10	1.480	-0.177	0.122	-0.365	-0.171	0.176	0.378	-0.069	0.113	0.318
15	0.15	0.15	1.703	-0.094	-0.047	-0.297	-0.186	0.200	0.402	-0.125	0.104	0.314
16	0.10	0.20	1.937	-0.075	-0.057	-0.475	-0.211	0.237	0.487	-0.159	0.111	0.345
17	0.05	0.25	2.254	0.034	0.050	-0.463	-0.156	0.175	0.608	-0.192	0.185	0.397
18	0.30	0.00	2.368	0.071	0.032	-0.520	-0.201	0.282	0.638	-0.198	0.227	0.377
19	0.20	0.00	1.853	0.034	-0.092	-0.375	-0.153	0.242	0.476	-0.115	0.176	0.352
20	0.10	0.00	1.175	0.028	0.065	-0.254	-0.063	0.102	0.252	-0.135	0.121	0.244
21	0.00	0.20	0.934	-0.278	0.025	-0.159	-0.108	-0.031	0.130	-0.051	-0.059	0.256
22	0.00	0.10	0.540	-0.160	0.028	-0.078	-0.031	-0.023	0.132	-0.027	0.000	0.131